

COPY

IN THE UNITED STATES DISTRICT COURT
FOR THE NORTHERN DISTRICT OF ILLINOIS
EASTERN DIVISION

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THE MAGNAVOX COMPANY, a)	
Corporation, and SANDERS)	
ASSOCIATES, INC., a corporation,)	Consolidated
)	Civil Actions Nos.
Plaintiffs,)	
)	74-C-1930, 74-C-2510
vs.)	
)	75-C-3153 and 75-C-3933
BALLY MANUFACTURING CORPORATION,)	
a corporation, et al.,)	
)	
Defendants.)	

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DEPOSITION OF
NOLAN K. BUSHNELL
TUESDAY, MARCH 2, 1978

---000---

VOLUME II

PAGES 155 - 282

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THE MAGNAVOX COMPANY, a)	
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ASSOCIATES, INC., a corporation,)	
)	Consolidated
Plaintiffs,)	Civil Action Nos.
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vs.)	74-C-1030, 74-C-2510
)	
BALLY MANUFACTURING CORPORATION,)	75-C-3153 and 75-C-3933
a corporation, et al.,)	
)	
Defendants.)	

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BE IT REMEMBERED, That pursuant to Notice of Taking Deposition and Subpoena, and continued to this time and place, and on Tuesday, the 2nd day of March, 1976, commencing at the hour of 9:35 a.m. thereof, at the offices of Messrs. FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT, 160 Sheridan Avenue, Palo Alto, California, before me, IRVIN C. SCHEIBE, a Notary Public in and for the City and County of San Francisco, State of California, personally appeared

NOLAN K. BUSHNELL,

recalled as a witness by the plaintiffs, who, having been by me previously duly sworn, was thereupon further examined and interrogated as hereinafter set forth.

Messrs. NEUMAN, WILLIAMS, ANDERSON & OLSON, represented by THEODORE W. ANDERSON, Esq., and JAMES T. WILLIAMS, Esq., 77 West Washington Street, Chicago, Illinois 60602, and

1 LOUIS ETLINGER, Esq., Director, Patents & Licensing,
2 Sanders Associates, Inc., and Messrs. ALLEGRETTI, NEWITT,
3 WITCOFF & McANDRES, represented by D. D. ALLEGRETTI, Esq.,
4 125 South Wacker Drive, Chicago, Illinois 60606, appeared as
5 counsel on behalf of The Magnavox Company and Sanders
6 Associates, Inc.

7 Messrs. FITCH, EVEN, TABIN & LEUDEKA, represented by
8 DONALD L. WELSH, Esq., and A. SIDNEY KATZ, Esq., 135 South
9 La Salle Street, Chicago, Illinois 60603, appeared as counsel
10 on behalf of Bally Manufacturing Corporation, et al.

11 Messrs. FLEHR, HOHBACH, TEST, ALBRITTON & HERBERT,
12 represented by THOMAS O. HERBERT, Esq., 160 Sansome Street,
13 San Francisco, California 94104, appeared as counsel on behalf
14 of Atari, Inc. and Kee Games.

15 Messrs. THREEDY & THREEDY, represented by EDWARD C.
16 THREEDY, Esq., 111 West Washington Street, Room 1406, Chicago,
17 Illinois 60602, appeared as counsel on behalf of Chicago
18 Dynamic Industries, Inc.

19 ---
20
21

22 NOLAN K. BUSHNELL,

23 recalled as a witness by the plaintiff, having been previously
24 duly sworn by the Notary Public to tell the truth, the whole
25 truth, and nothing but the truth, testified further as follows:

26 EXAMINATION BY MR. ANDERSON (Resumed):

27 MR. ANDERSON: This is a resumption of the Nolan
28 Bushnell deposition which was recessed in January.

1 Q. Mr. Bushnell, you recognize that you are still under oath
2 to testify and tell the truth in this case?

3 A. Yes.

4 MR. HERBERT: In the first session of this deposition
5 the questioning was by Mr. Williams. Ordinarily we have a
6 single attorney questioning a single witness. I think it should
7 be noted that we are changing attorneys in this case.

8 MR. ANDERSON: Well, I think I took Mr. Bushnell's
9 testimony prior to that.

10 MR. HERBERT: But that deposition was completed.

11 MR. ANDERSON: Well, I trust you are not concerned
12 that we are team-harrassing Mr. Bushnell.

13 MR. HERBERT: I am just putting it on the record.

14 MR. ANDERSON: Mr. Herbert, I think at the time of
15 the last deposition you indicated that you and Atari and
16 Mr. Bushnell were still involved in searching for documents
17 and indicated that you would be coming up with additional
18 documents in response to the notices and subpoenas that were
19 served in these cases. Have you completed those searches at
20 this time?

21 MR. HERBERT: To the best of our ability we have. We
22 have five boxes plus sundry things out of boxes here in the
23 room. In addition to some documents which were produced last
24 time, but we never got around to because of the adjournment of
25 the deposition. In addition to that, Mr. Bushnell has just
26 advised me that he has an early Pong prototype in his car
27 downstairs right now and at a convenient time we'll drag that
28 up here.

1 MR. ANDERSON: Perhaps while we look at documents he
2 can do that as the matter progresses.

3 MR. HERBERT: We'll see how it goes.

4 MR. ANDERSON: Q. At the time of the last deposition,
5 Mr. Bushnell, there was reference to your transcript from the
6 University of Utah. Do you recall that?

7 A. Yes.

8 Q. Do you have a copy of that transcript now?

9 A. I can't find it. I don't know what the situation was. I
10 sent for it. I understand it was received. I'm going to have
11 to forward that to you at a future date.

12 Q. When you say it was received, received by whom?

13 A. I think it was by my secretary.

14 Q. Did you see it when it arrived? A. No, I did not.

15 Q. Did you personally order it?

16 A. Yes, I did. Well, I personally ordered it for my secretary.

17 Q. There was also testimony during the last session and a
18 request for documents relating to Atari's internal considera-
19 tions of entering into the consumer product market, and you
20 were to produce additional documents on that subject. Have you
21 made a search for additional documents on that subject?

22 A. Any of the documents were just of a technical nature.
23 Every consideration was all really verbal.

24 Q. Are there any documents relating to your consideration of
25 a consumer product?

26 A. There are just the preliminary design specs and that sort
27 of thing.

28 Q. Are they available here now?

1 A. I believe they are.

2 Q. Are they documents that were not shown to Mr. Williams
3 during the last session?

4 A. Quite frankly, there has been so many documents I don't
5 know which ones were shown and which ones weren't.

6 Q. Well, can you produce the documents relating to the
7 internal consideration at Atari of whether or not Atari should
8 enter the consumer product business at this time?

9 MR. HERBERT: Well, as I have indicated earlier, these
10 documents are not categorized in that way. We have several
11 boxes of them. Although perhaps--

12 THE WITNESS: I don't really believe documents with
13 that specific title makes sense, you know. There are technical
14 drawings and we were doing it, you know--talking about considera-
15 tion, you know, I just don't believe there were such things.

16 MR. HERBERT: One box in which things are categorized
17 does not have that category in it.

18 MR. ANDERSON: Q. Did Atari do design work on a
19 consumer product other than the product that it sold to Sears?

20 A. Yes.

21 Q. Is that documentation here?

22 A. The documentation, you mean, of our next year's products?

23 Q. Of whatever consumer products you have considered
24 internally at Atari other than the Sears product.

25 A. No.

26 MR. HERBERT: No. That document has not been
27 requested by me. That was not part of the lawsuit and I think
28 I objected to that earlier. We are certainly willing to give

1 you documentation on anything which is manufactured, used and
2 sold that we have, but documentation on concepts would not at
3 this time be considered part of the lawsuit.

4 MR. ANDERSON: Q. When has Atari considered consumer
5 products other than the Sears product?

6 A. Oh, I guess ever since the company really got started.

7 Q. What is the earliest document that Atari has relating to
8 a consumer product or potential consumer product?

9 A. I think the very first schematic that Atari ever did was
10 a potential consumer product.

11 Q. What schematic do you have in mind?

12 A. Computer Space.

13 Q. Did Computer Space pre-date Atari? A. Yes, it did.

14 Q. What was the first drawing that Atari made that related to
15 a potential consumer game?

16 MR. HERBERT: The witness has already answered Pong.

17 MR. ANDERSON: He answered Computer Space.

18 MR. HERBERT: He answered Pong also. .

19 MR. ANDERSON: Q. I'm sorry. If you said that I
20 didn't hear you. Did you say Pong this morning or at some
21 other time?

22 MR. KATZ: Just now he said it.

23 MR. HERBERT: A minute and a half ago.

24 MR. ANDERSON: Q. The first drawing on Pong is your
25 testimony? A. I think that as far as documentation
26 that's true.

27 Q. What is the first document that you know of that Atari has
28 relating to a product specifically designed for or intended for

1 a consumer product?

2 A. That would probably be the chip. The schematics are there.
3 Weren't those produced last time?

4 MR. HERBERT: Those were produced last time.

5 MR. ANDERSON: Q. What chip are you referring to?

6 A. The LSI integration of a Pong computer.

7 Q. The chip drawing that was produced was a chip drawing of
8 the final LSI configuration; is that correct?

9 A. Yes. We had some preliminary drawings as well.

10 Q. Can you produce those at this time?

11 A. I think they were already produced.

12 Q. Well, I take it they are here, then. Can you bring them
13 out? We are not aware that we have seen anything prior to the
14 final LSI configuration for the Pong game.

15 MR. HERBERT: I brought the Bushnell exhibits as
16 requested. I did not bring the Lee exhibits which were taken
17 only in the Sears case. I'm not sure myself that there is
18 anything preliminary in that. I would have to take a look.

19 MR. ANDERSON: We have the Lee Exhibits 1, 2 and 3
20 here. However, Exhibits 2 and 3 are under a separate
21 protective order.

22 MR. HERBERT: Absolutely. With respect to the game
23 which has come to be known as Consumer Pong, we want a
24 separate protective order. It's a matter entirely between
25 Magnavox, Sanders, Sears and Atari. The other defendants in
26 this litigation are not at all involved. It is an extremely
27 sensitive area and we want to limit it to just those parties
28 and on the same level of secrecy set forth in the protective

1 order in the Sears stipulation. I believe it's Paragraph 5.

2 MR. ANDERSON: Yes, it's Paragraph 5 at Page 5. I
3 think the present inquiry, at the moment at least, has not
4 gotten into any confidential area.

5 MR. HERBERT: I am going to let him answer your
6 questions at the present time, but I wanted to alert you as
7 well as the other parties here that this is an area that is
8 particularly sensitive.

9 MR. ANDERSON: Well, I have the Lee Deposition
10 Exhibits here which I will hand to you, Mr. Herbert, if you
11 don't have your copies, and they appear to be final documents
12 perhaps made even after production.

13 MR. HERBERT: That was my understanding, but I would
14 like to take a quick look at them with Mr. Bushnell.

15 MR. ANDERSON: I have the entire file of three
16 exhibits which are copies of Exhibits 1, 2 and 3. You have
17 the originals.

18 MR. HERBERT: Mr. Anderson, all I can say is that they
19 may well be in these boxes, then, which is one reason we don't
20 want to just turn them over for inspection at this time. Some
21 of these things may be far more sensitive than I was able to
22 determine on my own inspection last night. Mr. Bushnell would
23 have to be the one to make that determination.

24 MR. ANDERSON: It appears that either you have to do
25 that or you have to permit us to do it, one or the two.

26 MR. HERBERT: We will do that. With respect to these
27 items, I don't know how might be the best way. There's a
28 substantial number. It might be just as well to go through

1 them as they appear and let you make your determination as to
2 whether you want to make them exhibits.

3 MR. ANDERSON: The substantial number of documents you
4 have just referred to are documents relating to the development
5 of the consumer product?

6 MR. HERBERT: No. Everything that's here. Not just
7 that. I think that there may be some documents on the develop-
8 ment of the consumer product. As we have recognized before,
9 the markings on the drawings are not always that clear to the
10 lay mind. Someone who is not totally familiar with them as
11 to what they are. I'm not going to take the responsibility of
12 determining that something is or is not related to the
13 consumer game.

14 Do you want to take a recess now?

15 MR. ANDERSON: Let's go through our shopping list
16 first and we may increase our efficiency if we don't go through
17 all the documents for each question.

18 MR. HERBERT: That's why I suggested we go through
19 them all once and let you make your decision then.

20 MR. ANDERSON: Q. Mr. Bushnell, during the last
21 session you were asked to produce all documents and things
22 relating to the Sears business and the negotiations and the
23 development of the product for Sears. Do you have those
24 documents with you?

25 A. Yes. There's a file there.

26 MR. HERBERT: Insofar as negotiations, you requested
27 that material and I believe last time we had that material
28 available and it was not made an exhibit. I looked through it

1 at the time of the deposition as I recall and found nothing
2 relating to the construction of the product in it. Does that
3 square with your recollection, Mr. Williams?

4 MR. ANDERSON: Well, certain Sears documents were
5 identified.

6 MR. HERBERT: Certain Sears documents were requested
7 and those are the contracts which we do have. They were
8 presented last time and the copies were far less than perfect.
9 We have better ones now.

10 MR. ANDERSON: We have no record or recollection of
11 seeing any documents relating to Sears negotiations that were
12 not marked as deposition exhibits.

13 MR. HERBERT: They were not shown to Mr. Williams.
14 I reviewed them myself here and advised him that there was
15 nothing in them relative to the construction and that they were
16 not material or relevant.

17 MR. ANDERSON: We would like to see those documents.

18 MR. HERBERT: I don't have them with me. My same
19 objection and refusal is there. It's not material and unless
20 you've got some reason to make them material they have nothing
21 to do with the patents in suit, have nothing to do with the
22 product construction.

23 MR. ANDERSON: Mr. Herbert, I know of no rule that
24 says immateriality is a reason for not producing any document
25 of a party to a lawsuit. They are definitely relevant. They
26 relate to negotiations and sales of the accused product, and
27 I think we are clearly entitled to full disclosure on the
28 accused product. I know of no basis on which you can properly

1 withhold them and I will make another request that we have them
2 produced during this deposition so that we will avoid the
3 expense and difficulty and delay of going to court and perhaps
4 making another trip out here.

5 MR. HERBERT: The factor of irrelevance not being a
6 good objection in the production of documents has been con-
7 sidered. That is the very reason we have all of those documents
8 here today in addition to the mountain of documents you have
9 previously requested. On the other hand, there's got to be some
10 limit or rationality and that is where we drew the line.

11 MR. ANDERSON: Your point was immateriality. You did
12 not say they weren't relevant. I say they are relevant and you
13 didn't--

14 MR. HERBERT: I say both.

15 MR. ANDERSON: I just disagree and I don't think we
16 want to waste a lot of time arguing about that. I would ask
17 you to reconsider producing these documents. If you don't
18 we will seek them and seek appropriate sanctions. Now, a trip
19 to California is a costly and time-consuming thing.

20 MR. HERBERT: Not nearly as costly as a trip to
21 Nashua from California.

22 MR. ANDERSON: Well, fortunately we haven't caused you
23 to make any trips to Nashua that I know of. You better speak
24 to Mr. Welsh about compensation for that.

25 Do you have any documents that you are willing to
26 produce relating to the relationship to Sears that you have not
27 already produced?

28 MR. HERBERT: Well, as I say, we do have the contracts

1 which are more readable.

2 MR. ANDERSON: May we have those at this time?

3 MR. HERBERT: All right. By the way, on these copies
4 as well as the ones previously produced we have blocked out the
5 quantity, unit cost and total costs.

6 MR. ANDERSON: Those are certainly relevant to the
7 issues of this lawsuit, Mr. Herbert.

8 MR. HERBERT: Not at this time. They may be if you
9 ever prove any liability.

10 MR. ANDERSON: Well, certainly the damages that we
11 suffered are what we are entitled to recover as issue in this
12 lawsuit.

13 MR. HERBERT: They are non-existent until you prove
14 liability. You can go to an accounting as far as I'm concerned.

15 MR. ANDERSON: You don't have a rule that says that,
16 do you?

17 MR. HERBERT: Given the occasion I'm sure I can get
18 a case or two. When you file your motion under Rule 37 I will
19 provide it to you.

20 MR. ANDERSON: Of the three stapled sets of documents
21 that you have handed me, only one of them appears to be a
22 better copy of one we already had and that's Exhibit 63. I
23 will have the Reporter mark the copy that you have just handed
24 us as Exhibit 63-A.

25 I will have the Reporter mark as Atari Deposition
26 Exhibit 98 a stapled set of documents, the first one of which
27 is a Sears, Roebuck and Company Amendment to Contract of
28 Purchase No. 528627, the collection comprising five pages.

1 I will have the Reporter mark as Atari Deposition
2 Exhibit 99 a four-page document that you have just handed me
3 the first page of which bears the printed heading Sears, Roebuck
4 and Co. Contract of Purchase, Contract No. C-129607.

5 We are marking the Xerographic copies of these
6 documents with the deletions that you have referred to,
7 Mr. Herbert.

8 MR. HERBERT: Yes. We could hardly provide the
9 originals with the deletions without--

10 MR. ANDERSON: We will ask again to see the originals.

11 (Above-described documents were
12 marked Atari Deposition Exhibits
13 63-A, 98 and 99 as described for
14 Identification.)

15 MR. ANDERSON: Q. Mr. Bushnell, the document which
16 has been marked Exhibit 63-A is entitled, "Amendment to
17 Contract of Purchase," and if I understand the document it
18 bears a contract date of 3/17/75 in a block on the first page.
19 Is that the date of the amendment or is that the date of the
20 original contract?

21 A. I really don't remember.

22 Q. Is Exhibit 63-A an amendment to an earlier contract?

23 MR. HERBERT: I think 63-A is a multiple-paged
24 document.

25 MR. ANDERSON: Q. The first page is the one I am
26 referring to.

27 A. I don't know. Quite frankly, the contracts are something
28 that's pretty much handled by our legal department or counsel
and I'm not really that familiar personally with the contracts

1 to be able to authenticate or disprove anything.

2 Q. Who is your legal counsel?

3 A. Hopkins & Carley.

4 Q. C-a-r-l-e?

A. C-a-r-l-e-y.

5 Q. What individual in that firm handled this contract for you?

6 A. Mr. Allen.

7 Q. What is his full name, do you know?

8 A. Lionel Allen.

9 Q. Was he the negotiator with Sears with respect to this
10 contract?

A. No.

11 Q. Who was the negotiator with Sears?

12 A. Mr. Keenan.

13 Q. Was anyone else involved besides Mr. Allen and Mr. Keenan
14 in arranging this contract with Sears and negotiating it?

15 A. The various of us who talked about it and verbalized it.
16 Reducing it to writing was Mr. Allen.

17 Q. Did the various others of you that you mentioned deal with
18 Sears personnel?

A. Yes.

19 Q. Is the second page of Exhibit 63-A a copy of the original
20 contract with Sears?

A. I don't know.

21 Q. Would Mr. Keenan know the answer to that?

22 A. I think he would.

23 Q. Mr. Herbert has indicated that there is other documentation
24 surrounding this contract. Have you produced that other
25 documentation here today?

26 A. I'm not sure what other documentation exists. This was
27 not something that I personally did.

28 Q. You are here today to testify on behalf of Atari?

1 A. Right.

2 Q. And as part of that, under the Federal Rules you were to
3 inform yourself about the searching that was done. Have you
4 done that?

5 A. In most instances. I couldn't
anticipate your questions.

6 MR. ANDERSON: Mr. Herbert, are the additional
7 documents that you refer to here today in this room?

8 MR. HERBERT: I have already mentioned what was
9 brought here earlier and I characterized the documents and it
10 was a rather large volume of documents having to do with
11 distribution points, delivery times, things totally unrelated
12 to this litigation, and I did not offer them to Mr. Williams
13 for viewing. I did tell him about them. I had them in front
14 of me and went through them sheet by sheet in his presence but
15 did not produce them.

16 MR. ANDERSON: Are you saying, Mr. Herbert, that every
17 document relating to the Sears negotiations and contract have
18 been shown to Mr. Williams, or only that certain ones have been
19 shown to Mr. Williams?

20 MR. HERBERT: Well, I requested them and every one
21 I have seen as I have already indicated has not been shown to
22 Mr. Williams.

23 MR. ANDERSON: There are some that have not been shown
24 to Mr. Williams?

25 MR. HERBERT: I just said that I did not show him
26 the volume of documents I had in front of me. It was a large
27 volume of documents and I personally went through them in his
28 presence. He did not see them, not to the extent he could read

1 them. He saw a stack.

2 MR. ANDERSON: In addition to the manuals on distri-
3 bution and so forth that you had at the deposition?

4 MR. HERBERT: These were not manuals. This was
5 correspondence trying to set things up. Although I believe
6 there may have been some manuals, too. I don't recall.

7 MR. ANDERSON: We would like to see the documents
8 relating to setting up the Sears contract and sale of the
9 consumer video game called Pong in order that we can decide
10 whether any of those documents are relevant or not. If you say
11 they are irrelevant, we say they are relevant. They are rele-
12 vant to the contract with respect to the accused product, the
13 sale of the accused product, and we are just dissatisfied to
14 not have an opportunity to look at the documents and see what
15 they say about the product, the competition, perhaps the patents.
16 Whatever they might cover. We are entitled to see them and
17 make our decision on relevance in view of the clear bearing on
18 the sale of the accused product.

19 MR. HERBERT: Mr. Anderson, we have already admitted
20 the sale of an accused product. I don't think even the
21 contract is relevant.

22 MR. ANDERSON: I think there is a great deal that is
23 relevant about the sale of the accused product other than the
24 mere fact that it was sold, and I'm sure you know that, too.
25 We will make again a request that we see the surrounding
26 documents on the negotiations and ultimate contract between
27 Atari and Sears for the sale of the accused game.

28 MR. HERBERT: These negotiations are, I'm sure you are

1 well aware, to a great extent related to the prices, costs,
2 volumes, and I don't think you are entitled to it.

3 MR. ANDERSON: We have a protective order. Your
4 only grounds for objection, then, is that you say that it's
5 confidential and that is not a sound basis.

6 MR. HERBERT: That is not the only ground for
7 objection. I also said it was totally irrelevant to the
8 litigation and not likely to produce any relevant testimony
9 or evidence.

10 MR. ANDERSON: I understand, Mr. Herbert, that
11 certain documents have been withheld from our inspection on
12 the ground of attorney-client privilege; is that correct?

13 MR. HERBERT: Yes, from time to time.

14 MR. ANDERSON: Have you provided us with a list of
15 the documents that you have withheld on the ground of attorney-
16 client privilege?

17 MR. HERBERT: I don't believe such a list has even
18 been requested. Even if it had been requested I certainly
19 don't recall having prepared one.

20 MR. ANDERSON: We would like to either see or have an
21 adequate identification of the documents withheld on the ground
22 of attorney-client privilege.

23 MR. HERBERT: I cannot provide that today, but we will
24 prepare such a list.

25 MR. ANDERSON: Are those documents here at this time?

26 MR. HERBERT: Some of them are in this office. Not
27 all of them.

28 MR. ANDERSON: Can we have the witness identify those

1 documents today in accordance with the notice and subpoenas
2 that are outstanding even though you are not willing to let us
3 see them?

4 MR. HERBERT: No. I said I can't do that today. I
5 don't even have them all here.

6 THE WITNESS: I'm not really clear exactly what you
7 want. I mean--

8 MR. ANDERSON: Well, Mr. Herbert is.

9 MR. HERBERT: Well, I am clear as to what you want,
10 but, frankly, you have taken Mr. Bushnell's deposition three
11 separate times and in this most recent one two separate sessions.
12 Frankly, I will have to go back and see what you have requested
13 and has been withheld on the attorney-client privilege.

14 MR. ANDERSON: I presume that either it is here today
15 or you have already made that evaluation and withheld it.

16 MR. HERBERT: I have made the evaluation, but I have
17 already indicated I do not have all the documents here in this
18 office.

19 MR. ANDERSON: Well, we want to see every document
20 that falls within the request.

21 MR. HERBERT: You are not going to see documents that
22 have the attorney-client privilege. I will provide a list, as
23 I have indicated.

24 MR. ANDERSON: And I would like that list to show the
25 addressor, the addressee, the date of the document, all
26 recipients of copies, the basis of withholding it and a general
27 characterization of the subject matter so that we can decide
28 whether or not it is entitled to the attorney-client privilege.

1 MR. HERBERT: The normal identification, I will
2 provide it.

3 MR. ANDERSON: And you will do that?

4 MR. HERBERT: I will do that but not today.

5 MR. ANDERSON: How soon do you think we can have that?

6 MR. HERBERT: We are on deposition apparently all this
7 week. I have no idea what we have for the next two weeks. As
8 soon as time permits. We have other people working on it.
9 Since I am the one who withheld them I think I personally will
10 have to go through it and check it.

11 MR. ANDERSON: As far as I know there has been no
12 discussion of any depositions for the next two weeks.

13 MR. HERBERT: Mr. Anderson, you have been through this
14 case as long as I have. You know darned good and well we're
15 going to be having depositions in the next two weeks, parti-
16 cularly since the discovery is to close in one month in the
17 New York case. My guess is that if we are in full depositions
18 for the next month I will have very little time, but I will
19 still try to get it done.

20 MR. ANDERSON: Q. Mr. Bushnell, we have also
21 requested of Atari in Paragraph 23 of our document request all
22 documents constituting, relating to or referring to (a) any
23 disclosures prepared in contemplation of filing any patent
24 applications in the United States or any other country relating
25 to video games, (b) any patent applications in the United
26 States or any other country relating to video games, (c) any
27 patents in the United States or any other country relating to
28 video games, (d) any licenses under any of said patent

1 applications and/or patents, or (e) any assignments or other
2 transfers of rights in or under any of said patent applications
3 and/or patents.

4 I understand that there are documents in this category
5 and we would like to have them produced at this time.

6 The request is Exhibit 35, I think, of the Bushnell
7 deposition.

8 MR. HERBERT: These documents are in this Palo Alto
9 office. Mr. Riddel is at the present time going through the
10 various files and pulling out the attorney-client privilege
11 material. They will be available to you this morning or early
12 afternoon.

13 MR. ANDERSON: All right. Our request is dated
14 December 12, 1975. The request, I understand, was repeated
15 during the January deposition.

16 MR. HERBERT: That's true.

17 MR. ANDERSON: We would like to have them just as
18 soon as possible.

19 MR. HERBERT: I said you would have them this morning
20 or early this afternoon. Perhaps you didn't hear me.

21 MR. ANDERSON: Q. Mr. Bushnell, with respect to
22 Exhibit 49, the Pong drawings, you were requested, I believe,
23 to produce the original vellums. Have you done that?

24 MR. HERBERT: They are here.

25 THE WITNESS: The original vellums?

26 MR. HERBERT: Yes. We have those documents. They are
27 originals. I do not want them marked as exhibits. Copies, and
28 I think very adequate copies, have already been marked as

1 exhibits. But you are certainly free to inspect the originals.
2 We request no marking at all on those originals.

3 MR. ANDERSON: Do you have Exhibit 49 here, Mr. Herbert?

4 MR. HERBERT: Yes. I think the record ought to show
5 that these are not vellums.

6 THE WITNESS: No. I think they are.

7 MR. ANDERSON: They are not quite vellums.

8 Q. The original pencilled drawing which Mr. Herbert has handed
9 us bearing the legend "Horizontal and Serve" appears to have
10 no other title on it; is that correct?

11 A. That's correct.

12 Q. And it is not dated. A. Correct.

13 Q. The blueprint that was marked as Exhibit 49-4 bears some
14 additional writing in the lower right-hand corner. Is that
15 in your handwriting? A. No, it isn't.

16 Q. Do you recognize the handwriting?

17 A. I think it's my secretary's.

18 Q. What does it say? A. "Original Sketch (Pong) (1)."

19 Q. Do you know when she placed that legend on there if it is
20 her handwriting?

21 A. I think it was prior to creating that as an exhibit.

22 Q. Did she do that at your instructions? A. No.

23 MR. HERBERT: I believe that the original exhibits on
24 each of these include a penciled addition placed on there
25 recently by Atari employees. The Exhibit 49-1 through 49-4 is
26 essentially a blue-line print of the original penciled drawings.
27 The penciled notation on the exhibits was no part of the
28 exhibit itself but merely an identification internally in

1 response to my request for materials.

2 MR. ANDERSON: And I gather a recently made identifi-
3 cation internally.

4 MR. HERBERT: Absolutely.

5 MR. ANDERSON: Q. Is that true also of the longhand
6 entries on Atari Exhibits 49-1, 49-2 and 49-3, Mr. Bushnell?

7 A. Yes.

8 MR. ANDERSON: Mr. Herbert, I wonder if we could have
9 a set of blueprints run from the originals. You prepared
10 Xeroxes for us from the blueprints which are less than legible
11 on a lot of the small letters.

12 MR. HERBERT: I don't believe it's a blueprint.

13 THE WITNESS: That's blueline.

14 MR. HERBERT: Blueline.

15 MR. ANDERSON: We did not get a blueline. This is
16 Mr. Herbert's that you're pointing to.

17 MR. HERBERT: That is not Mr. Herbert's. That is the
18 original exhibit. I, too, have a Xerox copy of the exhibit.

19 MR. ANDERSON: Well, if you would like us to retain
20 the blueline exhibit it will solve my problem. If not, if you
21 will have a blueline copy run for us, Mr. Herbert.

22 MR. HERBERT: We will provide a blueline copy.

23 MR. ANDERSON: Q. Mr. Bushnell, during an earlier
24 session you were asked to produce documents relating to the
25 purchase of parts for the Pong prototype. Have you produced
26 those?

27 MR. HERBERT: I was the one intimately involved in
28 trying to locate those documents and so far as this is concerned,

1 they will be purchase orders. Going through the purchase orders
2 is a massive job. Take a look at them. You can find them just
3 as easily as we can.

4 THE WITNESS: We had shoebox accounting in those days.

5 MR. ANDERSON: Will the purchase orders indicate on
6 their face, Mr. Herbert, that the parts were purchased for the
7 Pong game?

8 MR. HERBERT: I really don't know. I have not
9 located them.

10 MR. ANDERSON: I think, then, unless you can say that
11 they do it would not be equally easy for us to go through the
12 purchase orders as someone knowledgeable in the Pong game and
13 Atari's construction of the prototype Pong game. It will have
14 to be someone who will know and recognize the parts that were
15 ordered for the Pong game.

16 MR. HERBERT: Well, I have to disagree. The purchase
17 orders are not arranged in such a fashion that that can be
18 done.

19 MR. ANDERSON: I didn't suggest they were arranged
20 that way. We would like to have the purchase orders for parts
21 for the original Pong game, the prototype.

22 MR. HERBERT: You may inspect the purchase orders at
23 the Los Gatos facility.

24 MR. ANDERSON: Well, I will repeat my request, then,
25 that you advise me if those purchase orders will indicate that
26 parts were ordered for the Pong game. If not, I would ask
27 that the Atari personnel involved select the purchase orders
28 relating to the prototype Pong game.

1 MR. HERBERT: As I have already indicated, I don't
2 know.

3 MR. ANDERSON: You will give me the answer to that
4 question, I take it?

5 MR. HERBERT: I will give you the answer to that
6 question but still we're not going to search through the massive
7 piles of purchase orders to do it. I think you can do that as
8 well as we.

9 MR. ANDERSON: How many purchase orders are there,
10 Mr. Herbert, of Atari between its organization and, oh, the
11 end of October 1972?

12 MR. HERBERT: I have no idea.

13 MR. ANDERSON: You haven't even made an effort; then
14 you don't know that it's a massive job.

15 THE WITNESS: Oh, it is a massive job.

16 MR. ANDERSON: Q. Well, Mr. Bushnell, are the purchase
17 orders maintained in any kind of numerical or chronological
18 order?

19 A. All I know is that there are
20 essentially for fiscal 1973 many file cabinets full of all
21 kinds of stuff and we'll make those available to you.

22 Q. What is fiscal 1973?

23 A. Fiscal? It's the period from June of '72 to May 31st of
24 '73, and there's some other file cabinets relating to the
25 prior year.

26 Q. You say there are purchase orders relating to the prior
27 year before June of '72? A. Correct.

28 Q. When was Atari formed?

A. It was in '72, but--

1 Q. In June of '72?

2 A. In June of '72, but there was a partnership prior to that
3 that did a lot of purchasing as well.

4 Q. Did the records just carry through and become a part of
5 Atari's records when the corporation was formed?

6 A. Well, as the corporation was the survivor of the partner-
7 ship, yes, to the best of my knowledge.

8 Q. For the fiscal year 1973 how are your purchase order
9 records maintained, in what sort of order?

10 A. I don't know. I have just seen filing cabinets.

11 Q. Are they chronological or by customer or by source?

12 A. I don't know. I don't know.

13 Q. Will you provide us with that information?

14 A. Yes.

15 Q. In purchasing from vendors does Atari have a system for
16 designating the use to which the purchased parts are to be put?

17 A. Currently.

18 Q. When did that system begin?

A.. I don't know.

19 Q. Did it exist in 1972 or fiscal '73?

20 A. I really don't remember.

21 Q. Describe that system.

A. What system?

22 Q. For designating the use to which parts are to be put when
23 they are purchased from a vendor?

24 A. I think there's blocks on a purchase order. It says, you
25 know, "use."

26 Q. What goes in that box?

27 A. Well, I think currently it's either a code name or a
28 project number.

1 Q. At some time in the past was it some sort of a different
2 entry than a code name or project number put in that box?

3 A. I don't know.

4 Q. To what are code names applied?

5 A. Well, sometimes the code names are--you know, we decide
6 we're going to build a particular product and we call it some-
7 thing so that we all know what we're talking about. But it
8 would not necessarily be descriptive to someone who--a vendor
9 per se.

10 Q. Was there such a code name for the Sears product?

11 A. I think it was C Pong.

12 Q. Just capital C Pong? A. Yes.

13 Q. Does that appear on purchase orders?

14 A. I don't know.

15 Q. Was there a code name for the original coin-operated Pong?

16 A. I don't know.

17 Q. Was there a project number assigned to the original Pong
18 work?

19 A. I think along the line we called it
20 VP-2 which was a model number. But that was after the fact.

21 Q. What was after the fact?

22 A. I mean, the product was in existence. I think we designated
23 the model number when we made the Midway contract.

24 Q. You mentioned that there were file drawers of documents
25 relating to fiscal '73. Are there any drawers of documents
26 just relating to purchase orders for fiscal '73?

27 A. I believe so.

28 Q. Are the purchase orders filed separately from other Atari
documents?

A. I don't know. I mean, if it's

1 engineering it's separate, obviously, but I'm surmising.

2 MR. ANDERSON: We will repeat our request for those
3 documents. I think the testimony makes it clear that no search
4 has been made, no effort has been made to find out how these
5 documents are, in fact, filed and we would like to have them
6 searched for and produced for our inspection as we have requested
7 in the past.

8 MR. HERBERT: Rather than going through the same
9 reponse I made before, I will just refer back to it and
10 incorporate it here. We will provide for you the information
11 previously requested and permit you to inspect the purchase
12 orders.

13 MR. ANDERSON: Q. Mr. Bushnell, in your testimony in
14 January you referred to a Jim Davis or someone with a name like
15 that and then referred to him as Jim D. Have you determined
16 with any greater specificity who that individual was?

17 A. No, I haven't. In fact, I-- No.

18 Q. This was an individual who you said showed you a game
19 being played on a computer at the University of Utah; am I
20 correct? A. That's correct.

21 Q. Have you made any effort to determine who that individual
22 was? A. Yes, I have.

23 Q. What have you done in that regard?

24 A. I went to the university and went through the rogues'
25 gallery. They have a listing of the graduates for each school
26 year. I attempted to match a face with a name.

27 Q. Did you personally go to the university and do that?

28 A. Yes, I did.

1 Q. Where is the rogues' gallery maintained at the University
2 of Utah?

3 A. On the second floor in front of the electrical engineering
4 department.

5 Q. In what office or department?

6 A. It's in the hallway. It's actually right in front of the
7 computer center.

8 Q. Did you do anything else to try to establish who Jim D. was?

9 A. Yes, I did.

10 Q. What else did you do?

11 A. I talked to some of the people in the computer center
12 attempting to find some people that had been around at approxi-
13 mately the same time.

14 Q. Were you able to find anyone?

15 A. No, I wasn't.

16 Q. Do you remember anyone that you talked to at the University
17 of Utah in your effort to establish who Jim D. was, or anyone
18 else who was around at that time?

A. Yes, I do.

19 Q. To whom did you talk in your investigation?

20 A. Professor Carl Durney.

21 Q. How do you spell that? A. D-u-r-n-e-y.

22 Q. Anyone else?

23 A. I wrote the names down. I've got two names here and I
24 talked to one of them and was referred to the other one and I'm
25 not sure which one was which. One was a guy named Bob Pendleton,
26 and another was a guy named Dennis Stansfield and I don't
27 remember which one I talked to and which one was referred to by
28 the other. I was unable to contact the other fellow.

1 Q. When did you make this trip?

2 A. It was in the middle of January.

3 Q. Of 1976?

4 A. Yes. Sometime shortly after
the deposition.

5 Q. Did you prepare any report on your trip?

6 A. No, I did not.

7 Q. Any memoranda of any kind?

A. No, I did not.

8 Q. Were you able to find--

9 A. Well, memoranda? I wrote the names down in my notebook
10 here.

11 Q. Nothing other than that?

A. No.

12 Q. Were you able to find any document that would support your
13 testimony concerning Jim Davis showing you a game played on a
14 computer at the University of Utah in 1965?

15 A. No.

16 Q. Did you find any documentation that would support your
17 testimony that a game was played on a computer at the University
18 of Utah in 1965?

A. No.

19 Q. Did you find anything other than documents, tangible, that
20 would support your testimony that a game was played on a
21 computer at the University of Utah in 1965?

22 A. Yes.

23 Q. What did you find that was tangible?

24 A. Oh, tangible?

25 Q. Yes.

26 MR. HERBERT: Define what you mean by tangible,
27 Counsel.

28 MR. ANDERSON: Q. Physical. Something that you

1 could bring back with you or that we could go see there.

2 A. Excuse me just a second. No.

3 MR. ANDERSON: Let the record show that you have had a
4 conference with Mr. Herbert on the subject.

5 MR. HERBERT: The conference with Mr. Herbert was with
6 respect to your definition of tangible and what it is you actually
7 wanted.

8 MR. ANDERSON: Q. In your earlier testimony you
9 indicated that you weren't certain whether the computer was a
10 Univac 1108 or an IBM 794 that you saw a game played on. Do
11 you now know which of those two it was?

12 A. No, I don't.

13 Q. Did you make any effort to find out at the University of
14 Utah? A. No.

15 Q. Did you make any effort to find out what computer was at
16 the University of Utah in 1965 at the time you say you saw a
17 game played on a computer there? A. No.

18 Q. How long were you at the University of Utah in mid-January
19 1976? A. About three or four hours.

20 Q. Did you make the trip there especially to investigate the
21 situation about which you have been testifying?

22 A. No.

23 Q. You also testified--

24 A. Maybe I should clarify. I went to the University of Utah
25 engineering building specifically for that. My trip to Utah
26 was not geared at that.

27 Q. You testified, I think, that about a year later you again
28 had contact with a game played on a computer at the University

1 of Utah? A. Correct.

2 Q. And that you had had to the best of your knowledge no

3 contact with a game played on a computer in the interim between

4 those two events; is that correct?

5 A. That's correct.

6 Q. The second event that you referred to, have you been able

7 to establish when that occurred specifically?

8 A. No.

9 Q. Do you believe that it was in 1966 or 1967 or do you have

10 a belief? A. I believe it was in '66.

11 Q. You mentioned in that particular context a Randall Willey,

12 W-i-l-l-e-y. A. Willey.

13 Q. Have you been in touch with Mr. Willey since your last testi-

14 monty? A. No, I have not.

15 Q. Have you made an effort to find Mr. Willey?

16 A. Yes, I have.

17 Q. Have you succeeded? A. No, I have not.

18 Q. Do you know his present location?

19 A. No, I do not.

20 Q. What effort did you make to find Mr. Randall Willey?

21 A. I called a couple of my fraternity brothers.

22 Q. What else? A. That's the extent.

23 Q. You testified that you obtained a listing of a program

24 from Randall Willey; is that correct?

25 A. I don't remember whether it was from Randall or whether one

26 of the other guys. I really don't remember. I got the listing

27 from either him or one of the guys that he named.

28 Q. Was that listing in some machine language of a particular

1 machine?

A. Yes, it was.

2 Q. What machine?

3 A. You mean what machine or what language?

4 Q. What machine?

A. I don't remember. It relates
5 to the IBM versus Univac problem.

6 Q. It's the same problem? It was one of those two; is that
7 your testimony?

8 A. The languages for either machine are--I mean, it wasn't in
9 a--the language that it was written in I think is the basic
10 language that crosses computer types.

11 Q. In what language do you say that listing was that you
12 obtained from Randall Willey or someone?

13 A. It was in a higher-level language. I don't remember whether
14 it was Fortran or Algol. I understood it so it should have been
15 one of those two.

16 Q. I understand that there is more than one Fortran; is that
17 true?

A. Yes.

18 Q. Which Fortran do you think it might have been in?

19 A. I have no idea.

20 Q. I believe you testified that you did not know anything about
21 Algol until after you had taken two computer courses at the
22 University of Utah; is that right?

23 A. Yes.

24 Q. What were they, EE-75 and 175?

25 A. I believe those were the numbers.

26 Q. Have you established when you took those courses?

27 A. No. When I get my transcript I will have that established.

28 Q. While you were at the University of Utah did you inspect

1 your transcript?

A. No.

2 Q. Did you make any effort to inspect your transcript?

3 A. No.

4 Q. You testified also that there was some type of display used
5 with the computer that you saw on the two occasions at the
6 University of Utah when you played a game on it. Do you now
7 know what the display was?

A. No.

8 Q. Have you made any effort to find out what the display was
9 that was used on the University of Utah computer that you
10 played games on?

A. Yes.

11 Q. What have you done in an effort to find that out.

12 A. On that visit I attempted to find some people who had been
13 around at that time.

14 Q. Did you find anyone?

A. No, I did not.

15 Q. What else did you do to try to find out what display was
16 used with a computer at the University of Utah?

17 A. That's it.

18 Q. Did you make any effort to check the records of the University
19 of Utah to see what they had in the way of equipment in the
20 critical period of '65, '66 or '67?

21 A. No, I did not.

22 Q. After you conferred with Mr. Herbert about my meaning of the
23 term "tangible," you said you had no further information about
24 the 1965 computer and the game you played. Do you have any
25 intangible information with respect to that that you gained
26 during your trip to the University of Utah?

27 MR. HERBERT: Yes or no.

28 THE WITNESS: No.

1 MR. ANDERSON: Q. You have no intangible information?
2 A. Well, yes.
3 Q. Yes, you do have intangible information?
4 A. Yes.
5 Q. Information of any kind? A. Yes.
6 Q. That you have gained as a result of your trip to the
7 University of Utah? A. Yes.
8 Q. What information have you gained since your last testimony
9 in that regard?
10 A. Well, as I said, I gained a name of a fellow who was
11 supposedly still there who was around at approximately that
12 time.
13 Q. What is his name?
14 A. One of those two names that I gave you.
15 Q. Mr. Durney or Mr. Pendleton or Mr. Stansfield?
16 A. Mr. Durney was there but he was not in the computer science
17 area.
18 Q. So it would be Mr. Pendleton or Mr. Stansfield?
19 A. Right.
20 Q. And you did talk to one of them? A. Yes, sir.
21 Q. Is that the individual you mean the one you talked to who
22 was there? A. No. He referred me to the other
23 fellow.
24 Q. And you don't know which is which? A. Right.
25 Q. Is there any other information of any kind that you gained
26 during your trip to Utah or from any other source since your
27 last testimony with respect to that early activity of yours in
28 1965 at the University?

1 A. I just gained the basic statement that, yes, games were
2 still being played at the University of Utah in great abundance.

3 Q. Well, from whom did you obtain that statement?

4 A. The fellow I talked to. One of those two. I should have
5 written it down, you know, which guy I talked to.

6 Q. Well, the fellow that you talked to whose name you can't
7 remember I gather from your testimony was not there at the
8 critical time?

A. Right.

9 Q. All right. Any other information?

A. No.

10 Q. When you obtained this listing that you have referred to
11 from Mr. Willey in what physical form was that, cards or fanfold
12 or--

A. Fanfold.

13 MR. HERBERT: I think you are mischaracterizing the
14 previous testimony. I don't believe Mr. Bushnell has ever
15 testified as having received a listing from Mr. Willey. On
16 Page 28 of the previous transcript your question is:

17 "You said you asked Mr. Willey for a listing of
18 the current Space War games. Did he give you such a
19 listing?"

20 Answer, "He told me where I could get one. He
21 directed me to a guy and he gave me a listing."

22 Question, "Who was the guy?"

23 Answer, "I don't remember."

24 MR. ANDERSON: Q. I am sorry if I have mischaracterized
25 your testimony. Don't hesitate to straighten me out if I do
26 that, Mr. Bushnell.

27 Is it a fact, then, that you did not get the listing
28 from Mr. Willey?

1 A. I really don't remember. I got a listing. I can remember
2 that Mr. Willey was, you know, part of the transaction. I don't
3 remember what part he played. This is six or seven years ago.

4 Q. I think your testimony was that you made some changes in
5 the program represented by that listing?

6 A. Correct.

7 Q. Physically how did you make those changes?

8 A. In the margin of the listing in parentheses.

9 Q. What did you do with the listing with those changes on it?

10 A. Gave it to the guy who was custodian and asked him to
11 implement them.

12 Q. Is it your testimony that he did implement them?

13 A. Yes, he did.

14 Q. How did he implement them? A. I don't know.

15 Q. Did you see him implement them? A. No, I didn't.

16 Q. How do you know that he did implement them?

17 A. I saw the results.

18 Q. How did you observe the results?

19 A. On the face of the screen.

20 Q. What was the physical form of the program when it was put
21 into the machine? A. I don't know.

22 Q. Was it punchcards?

23 A. That was the normal thing. I don't know what it actually
24 was.

25 Q. When you say that it was the normal thing, that was the
26 normal thing for what?

27 A. Well, see, there are three or four ways you can access a
28 machine. You can do it with punchcards. You can keep the whole

1 program stored in core or on tape. If it's a minor change
2 sometimes you just have a listing on the terminal and you make
3 the editing on the program and store it in the computer. I
4 don't know what was used in this instance. If it's a permanent
5 change generally you change the card deck and that way you can
6 put it in a file and in case the computer bombs you don't lose
7 your program. If it's stuck in core and the computer goes down,
8 then you would have to start from scratch.

9 Q. Do you know what input peripherals existed with respect to
10 the computer that you say you used at the University of Utah?

11 A. Well, basically there were card readers, alphanumeric tele-
12 typewriters. There were, you know, card punches. It had a
13 lot of tape storage, a lot of disc storage, a lot of core. It
14 had the whole McGill.

15 Q. But you don't know what physical form the program was kept
16 in for this game that you say they had at the University of
17 Utah, whether it was on cards or on tape or what?

18 A. I really don't think that that's relevant because, you know,
19 you can--

20 MR. HERBERT: Just answer the question "no."

21 THE WITNESS: No, I don't know.

22 MR. ANDERSON: Q. I think you testified that after you
23 made this change in the program you played a game on the
24 University of Utah computer for a period of time thereafter?

25 A. Correct.

26 Q. And then for a subsequent period you did not play a game
27 on the computer until the time you left the University of Utah?

28 A. That's correct.

1 Q. What was the first period when you played and then how long
2 was the period between the time you stopped playing any game on
3 the computer and you left the University of Utah?

4 MR. HERBERT: I think those questions have already
5 been asked and answered at Page 31 of the previous transcript.

6 THE WITNESS: That could be.

7 MR. HERBERT: But there is no need in repeating. We
8 already have the information. It just prolongs the deposition.

9 MR. ANDERSON: You can answer the question.

10 MR. HERBERT: All right, answer. I'm not instructing
11 you not to answer.

12 THE WITNESS: Well, it was a matter that somebody
13 fouled the computer up one time playing games so that the
14 University really clamped down on it. So it was not a matter
15 of not wanting to, it was a matter of just not being allowed
16 to. I don't remember exactly the time frame. I think the
17 space was about one-quarter that I played several times and
18 then subsequent to that from that time until the time I left
19 there was no more game playing.

20 MR. HERBERT: The record should show that although his
21 language is almost identical to the language at Page 31 of the
22 previous transcript, he did not have that transcript before him
23 in making his answer.

24 MR. ANDERSON: Q. Mr. Bushnell, you testified about a
25 paper that you prepared while at the University of Utah on games.
26 Have you made a further effort to find a copy of that paper?

27 A. No, I haven't.

28 Q. I think you said that that paper was done in conjunction

1 with a course of Professor Atwood; is that correct?

2 A. I believe that's true.

3 Q. Have you contacted Professor Atwood as you indicated I think
4 that you were going to do? A. No, I haven't.

5 Q. Do you have any better information today than you had at
6 the time of your last deposition session with respect to that
7 paper or its contents or its location at the present time?

8 A. No.

9 Q. Mr. Bushnell, I think during the last session you agreed to
10 make a further search through files on various games in an
11 effort to find documents on early games. Have you done that?

12 A. I believe that was provided for Mr.-- Oh, you mean further
13 search? I think what you've got is--

14 MR. HERBERT: I think essentially that is what we have.
15 We have a great deal of that. I don't know what you mean by
16 early games. That was not my understanding of the request. My
17 understanding of the request was for all games.

18 MR. ANDERSON: I presume that will pick up early ones,
19 too.

20 MR. HERBERT: That will pick up early ones, too, but
21 all games were requested, and, quite frankly, I felt that the
22 later games was a bit much.

23 MR. ANDERSON: At the time the discussion was with
24 respect to Attachment A to the subpoena, Paragraphs 1 through
25 4, and--

26 MR. HERBERT: That has an exhibit number, does it not?

27 MR. ANDERSON: Exhibit 36.

28 MR. HERBERT: All right, go ahead. I have it in front

1 of me.

2 MR. ANDERSON: This search that you were going to make
3 with respect to the documents designated in Paragraphs 1 through
4 4, I believe. Is that correct? Is that the search that has
5 been made?

6 MR. HERBERT: The search was, I think, expanded well
7 beyond that. This has a cutoff date of December 31, 1969.

8 MR. ANDERSON: The attachments are not identical. The
9 attachment that I'm referring to is Attachment A to the Notice
10 of Deposition in Magnavox v. Bally.

11 MR. WELSH: And that is Exhibit 36?

12 MR. ANDERSON: October 20, 1975 was the original date
13 for that. It's not an exhibit.

14 MR. HERBERT: Oh. It is not an exhibit? I'm not sure
15 I ever received a copy of it although I'm sure it was--

16 MR. ANDERSON: It was Exhibit 37, Attachment B,
17 Paragraphs 1 through 4.

18 MR. HERBERT: Oh. Well, again, I think the request was
19 far beyond that. This relates to Pong, Space Race, Winner,
20 Asteroid, VP-1, VP-2 and the several videogames referred to
21 at Page 36 of Mr. Bushnell's 1974 deposition. The request went
22 beyond that and asked for the same documentation on all other
23 games and we've got that.

24 MR. ANDERSON: That is what you have produced?

25 MR. HERBERT: That is what we have. I will say that
26 that was the request at the last session of Mr. Bushnell's
27 deposition.

28 MR. ANDERSON: Was any effort made to separate out the

1 documents responsive to the specific four paragraphs?

2 MR. HERBERT: They are separated out but I don't have
3 them stacked by themselves. I mean, they are named.

4 MR. ANDERSON: All right.

5 Q. Mr. Bushnell, in your prior testimony there was reference
6 to a Larry Bryan and I believe he was involved in the original
7 game work that you did? A. Correct.

8 Q. What was his specific involvement in that original work?

9 A. He was a programmer.

10 Q. Was he a programmer employed by some company at that time?

11 A. Yes.

12 Q. By whom? A. Ampex.

13 Q. Did he ever go to work for you or any of your companies?

14 A. No.

15 Q. As a programmer what did he do in conjunction with the
16 efforts to design a game?

17 A. He did the preliminary software architecture.

18 Q. The preliminary software architecture for what?

19 A. A generalized game-playing computer.

20 Q. Did it have any name or identification?

21 A. No.

22 Q. When did he do this work? A. Well, it was probably
23 in early 1970.

24 Q. Did he turn over the work that he did to you?

25 A. We viewed it together. I don't remember whether he actually
26 gave me a copy of what he was doing.

27 Q. Who viewed it together, you and Mr. Bryan and anyone else?

28 A. I think it was just he and I.

1 Q. Was Mr. Dabney involved at that time? A. No.

2 Q. At that time did you have any business relationship with
3 Mr. Larry Bryan? A. No.

4 Q. Was he compensated in any way for his work?

5 A. Well, he was going to be part of the group. I mean, I'm not
6 sure what you call--you know, during the genesis of the company
7 I'm not sure whether that's a business relationship or not. You
8 know, we were talking about the skills that were needed to do
9 the task and he was going to be one of the partners.

10 Q. Was the group you just referred to Syzygy?

11 A. I guess it's what later would have been called Syzygy.

12 Q. When was it first called Syzygy, in 1970?

13 A. Yes.

14 Q. When in 1970, do you know? A. No, I don't.

15 Q. Was Larry Bryan still in the group when it was called
16 Syzygy? A. I really don't remember.

17 Q. What was done with the work that he did on software for a
18 game? A. When we decided that the software

19 approach was not the right approach I guess it was thrown away.

20 Q. When did you decide that the software approach was not the
21 right approach?

22 A. It was about the middle of 1970. It might have even been a
23 little bit later than that, I'm not sure. We worked on several
24 programs and--

25 Q. You have testified about some of those programs before. How
26 many different programs did you work on at that time?

27 A. Now we're getting into a problem of semantics. A program
28 obviously is a program. Then there's a program that's a

1 computer operating instruction. The program? Which do you
2 mean?

3 Q. I'm not sure I understand your distinction. There is a
4 program that is a program--

5 A. There were programs and there were projects.

6 Q. Oh. I mean a computer program not a project. That's what
7 I understood that you referred to. Am I wrong? When you said
8 that Mr. Bryan worked on preliminary software.

9 A. I meant programs.

10 Q. You meant writing a program? A. Right.

11 Q. And it's that program that I was referring to. Was there
12 more than one program worked on by your group in 1970?

13 A. Well, there were several escalations. I mean, you know, we
14 junk one idea and move on to another one as it worked or didn't
15 work or seemed to solve the problem.

16 Q. Do you have any documentation on that work in 1970?

17 A. I think we supplied some of the hardware interfaces, but
18 that didn't include I don't think any computer listings.

19 Q. Did computer listings exist in 1970 for your game work?

20 A. I don't believe any programs ever actually made it to a
21 computer.

22 Q. Did Larry Bryan leave the group of his own volition or did
23 the group eliminate Larry Bryan?

24 A. We just kind of talked about it and, you know, it was
25 pretty speculative at the time when we--you know, when it was
26 something that he didn't have a part of. It was obviously not
27 a full-time task for any of us and he just sort of dissolved.
28 It wasn't a kickor or a kickee.

1 Q. You say he didn't have any part of it. Is that because his
2 skills were programming? A. Correct.

3 Q. At what point in time was a decision made, if a decision
4 was made, to drop the programming approach completely and go to
5 a hardware game?

6 MR. HERBERT: He has already answered that question.

7 MR. ANDERSON: I don't think with a specific date, has
8 he?

9 MR. HERBERT: I think he said mid-1970.

10 THE WITNESS: Yes. It was mid or late '70, I believe.

11 MR. ANDERSON: Q. Was there any event that fixed that
12 transition?

13 A. Well, I think the absolute decision was when we had finally
14 selected the computer and were kind of going to buy one when we
15 decided definitely to not buy the computer, is the best way I
16 could think of setting the time.

17 Q. Was that computer the Data General computer?

18 A. Correct.

19 Q. Just to try to fix that date as firmly as possible,
20 Mr. Bushnell, I show you Atari Exhibit 39 about which you did
21 give some testimony in January. A part of that exhibit is
22 Page 39-2, a letter from you dated January 26, 1971 to Bob
23 Washburn at Data General. At this point in time had you made
24 this decision to drop the software approach or not?

25 A. No. At this point we had not completely ruled out that we
26 would use the software approach.

27 Q. With that document, Exhibit 39-2, in front of you, can you
28 fix the event any more firmly when you did make the decision to

1 drop the software approach and go to the design of a hardware
2 game?

3 A. It was somewhere close to then because that letter was never
4 sent. Obviously sometime between the time that I wrote the
5 letter and decided not to send it I decided that I didn't want
6 to put my money where my mouth was. That's always a point of
7 decision.

8 Q. Again, to try to pin down that date, that event, as tightly
9 as possible, I place before you Atari Exhibit 40 and turn to
10 Page 40-1, a letter from Mr. Washburn of Data General to you
11 dated February 16, 1971, and referring to telephone conversa-
12 tions of that date. Can you state the status of your evaluation
13 of software as of February 16, 1971?

14 A. I was probably still considering the software approach at
15 that time.

16 Q. With Exhibit 40-1 in front of you can you now recall with
17 any greater specificity when you made the decision to drop the
18 software approach?

19 A. I think it would be probably almost coincident because, you
20 know, he was pushing for the order and we were saying, "No, no,
21 no." So it was still obviously keeping into my mind an awful
22 lot of questions about the viability of that approach.

23 Q. I think I asked you if you contacted Professor Atwood and
24 you said, "No." Did you make any effort to contact him at all?

25 A. Yes, I did.

26 Q. What effort did you make to contact him?

27 A. Several telephone calls.

28 Q. What happened when you made those phone calls?

1 A. There was no one at home.

2 Q. Did you ever get an answer at the number you were calling
3 for him? A. No, I did not.

4 Q. Is he still a professor? A. Yes, he is.

5 Q. At the university? A. Yes, he is.

6 Q. Did you try his university number?

7 A. Not while I was there. I was there on a weekend.

8 Q. Did you at any time try to call him at his place of work?

9 A. No, I haven't.

10 MR. ANDERSON: I think at this time probably we can
11 take a break and start working on documents.

12 MR. HERBERT: All right.

13 (Recess.)

14 ---

15 MR. ANDERSON: Mr. Herbert has handed me a collection
16 of Xerographic prints of drawings which he has indicated all
17 relate to the game Pursuit, and I will have the Court Reporter
18 mark that collection as Atari Deposition Exhibit 100 and ask
19 the Reporter to mark them 100-1 through whatever it takes to
20 complete numbering this set.

21 (Group of Documents were marked
22 Atari Exhibits 100-1 through
100-81 for Identification.)

23 MR. HERBERT: The next item I've got, and there is a
24 note attached to it that, "We could not copy." We have the
25 originals, such as they are. These are two.

26 MR. ANDERSON: The date 12/1/73 for Soccer. The
27 second one you're holding, Sheet 1, Soccer, dated 12/1/73 RM
28 and the legend "wire wrap."

1 MR. HERBERT: They apparently were not able to copy
2 them. These ripped. What is your inclination with respect to
3 these?

4 MR. ANDERSON: These are pasted-up Xeroxes.

5 MR. HERBERT: They certainly appear to be.

6 MR. ANDERSON: But there is no available original?

7 MR. HERBERT: Not to my knowledge. As I have indicated,
8 I have the girls' note that they could not copy these.

9 MR. ANDERSON: I think we will not require copies and
10 won't mark those two drawings, unless counsel for one of the
11 defendants wants to.

12 MR. HERBERT: This is a set of documents for Pong
13 Doubles.

14 THE WITNESS: Pong Doubles is the first one. It just
15 has schematics for a lot of games. Qwak, Cueball, some ECN's,
16 Race Track 2.

17 MR. HERBERT: In further looking at Exhibit 100 I note
18 that there are other games mentioned in there which was not my
19 original understanding of these documents.

20 THE WITNESS: It looks like this is a pretty complete
21 set of schematics of just about all the games including some
22 that were never built. It looks like some of them are engineer-
23 ing and some of them are engineering releases. It looks like
24 some of them are just engineering work papers.

25 MR. HERBERT: I think we better correct the record.
26 The description of Exhibit 100, although the first few sheets
27 are directed to Pursuit, there are farther down in the stack
28 drawings on Spike, Race Track and other games. Even so, I think

1 it might be well to identify this as a stack of drawings and
2 I will attempt to determine from the secretary who actually
3 assembled all of these things as they are assembled what break-
4 down of the various games.

5 MR. ANDERSON: What is the significance of the grouping
6 is, I think, our question.

7 THE WITNESS: I would guess this is a copy--

8 MR. HERBERT: Wait. If you're going to guess, you
9 guess to me, not to them.

10 (Discussion off the record.)

11 MR. HERBERT: All right, put that on the record.

12 THE WITNESS: I think it's the contents of the history
13 file.

14 MR. ANDERSON: Q. When you say "it," to what are you
15 referring, Exhibit 100 or the next set that Mr. Herbert has
16 just handed you, or both?

A. Possibly both.

17 Q. When you say the history file, is there a specific file
18 called the history file at Atari?

A. Yes.

19 MR. HERBERT: In view of that, and also the fact that
20 Mr. Bushnell is not absolutely certain, again I will attempt to
21 find out the organization of these things. It still appears to
22 me that for identification, if you just want to take a look at
23 them and get them marked now, it might still be the best way to
24 do it by identifying whatever is on that first sheet and having
25 it marked and do the subsequent pages at your leisure.

26 MR. ANDERSON: All right.

27 MR. HERBERT: The second set, the first sheet is
28 marked--Pong is crossed out and the name Doubler is in there.

1 So this is a stack of drawings starting with Doubler.

2 MR. ANDERSON: Q. There is some very dark writing
3 right next to the word Doubler, Mr. Bushnell. Is that in your
4 handwriting? A. No.

5 Q. Can you read it?

6 A. "Copy of first schematic of Pong Doubles."

7 Q. Do you know who made that entry?

8 A. It looks like Bristow's writing, Steve Bristow, vice-
9 president of engineering.

10 MR. ANDERSON: We will have that collection that you
11 just referred to, Mr. Herbert, marked as Atari Deposition
12 Exhibit 101 and the Reporter will number them 101-1 through
13 whatever it takes to complete the sequence.

14 (Group of documents were marked
15 Atari Exhibits 101-1 through
16 101-96 for Identification.)

17 MR. ANDERSON: Q. While Mr. Herbert is pulling the
18 next pile, in this collection 101, Mr. Bushnell, there is a
19 drawing marked "Cosmic Combat." Do you know what game was
20 called Cosmic Combat? Does that ring a bell?

21 A. We had several space games, I believe. I'm not sure exactly
22 which one that was.

23 Q. Is Cosmic Combat a game that was ever sold commercially to
24 the best of your knowledge?

25 A. No. For awhile we called Computer Space Cosmic Combat.
26 Where is that particular schematic?

27 Q. That may be what that drawing relates to. I place before
28 you the drawing that I just made reference to which is a part
of Exhibit 101.

1 MR. HERBERT: The drawing is entitled "Position and
2 Line Counter Cosmic Combat drawn by S. F. Dabney, January 26,
3 1971, Syzygy Co., San Jose, California."

4 THE WITNESS: I believe this is part of the game that
5 was known later as Computer Space.

6 MR. ANDERSON: All right, thank you.

7 MR. HERBERT: This will still be under the confidential
8 rather than secret.

9 MR. WELSH: That is the last sheet of 101?

10 MR. ANDERSON: No, it's not the last. It's about the
11 fifth from the last.

12 MR. HERBERT: The next package seems to get back into
13 the breakdown that I thought I had on all of them. This is for
14 Race Track.

15 MR. ANDERSON: Is the packet you have handed me four
16 copies of every print?

17 MR. HERBERT: No. One copy.

18 MR. ANDERSON: We will have the Reporter mark that
19 packet of drawings of Race Track as Atari Deposition Exhibit 102
20 numbering them sequentially within the packet.

21 (Group of Documents relating to
22 Race Track was marked Atari
23 Exhibits 102-1 through 102-30 for
Identification.)

24 MR. HERBERT: The next packet is for 8-Player Race
25 Track, otherwise known as Indy 800.

26 MR. ANDERSON: I will have the Reporter mark these
27 three sheets that you have just handed me relating to Indy 800
28 as Atari Deposition Exhibit 103.

(Documents relating to Indy 800 were marked Atari Exhibits 103-1 through 103-3 for Identification.)

MR. HERBERT: The next packet again relates to Race Track. The first sheet for a better identification is entitled "Fab. dwg. PC board."

MR. ANDERSON: I will have the Reporter mark that collection you have identified as Atari Deposition Exhibit 104.

(Documents relating to Race Track were marked Atari Exhibits 104-1 through 104-13 for Identification.)

MR. ANDERSON: The next group?

MR. HERBERT: The next group of documents is related to a game Pin Pong. One of the drawings in the stack includes that combination of it. The first sheet, however, does not seem to.

MR. ANDERSON: Are they in any particular order that you know of, Mr. Herbert?

MR. HERBERT: As I have indicated earlier, I will try to get that information. I don't know of any particular order, no.

MR. ANDERSON: If it's all right with you why don't I put the one that bears the legend Pin Pong on top.

MR. HERBERT: All right. Take the last three sheets and put them on top so they will all have the same numbering. It's also labeled "Pre-Production Release A."

MR. ANDERSON: That's correct. I will have the Reporter mark that collection as Atari Deposition Exhibit 105, again numbering them sequentially in a group.

(Group of Documents relating to Pin Pong were marked Atari Exhibits 105-1 through 105-12 for Identification.)

MR. HERBERT: I mistakenly had a non-video game here.

MR. ANDERSON: Mr. Herbert, are you sure that all the drawings in that group relate to Touch Ball?

MR. HERBERT: Good point. Yes.

The next packet is for the game Jaws. The second sheet has the title "Fish."

THE WITNESS: Code name.

MR. HERBERT: A code name. According to our earlier procedure, I put that on top.

MR. ANDERSON: All right. I will have the Reporter mark that as Atari Deposition Exhibit 106 and sequentially number the drawings.

(Documents relating to Jaws were marked Atari Exhibits 106-1 through 106-12 for Identification.)

MR. HERBERT: The next is a group of documents for the game Anti-Aircraft.

MR. ANDERSON: I will have the Reporter mark those as Atari Deposition Exhibit 107 and number them sequentially.

(Documents relating to Aircraft were marked Atari Exhibits 107-1 through 107-38 for Identification.)

MR. HERBERT: The next one is a group of drawings for the game Race Track 2.

MR. ANDERSON: I will have the Reporter mark those as Atari Deposition Exhibit 108 and number them sequentially.

(Group of documents relating to

Race Track 2 were marked Atari Exhibits 108-1 through 108-14 for Identification.)

MR. HERBERT: The next item I have is marked two originals which they could not copy. Seeing the originals, I understand their problem. It's not two originals, it's one original. It seems to have no designation but it was in the stack for Race Track 20.

Nolan, can you tell whether that's for Race Track 20 by looking at it?

THE WITNESS: Yes. Boy, you've got me. It could be either singles or doubles.

MR. HERBERT: Well, I will show you the original which they were unable to copy.

MR. ANDERSON: We won't need a copy of that unless one of the defendants wants it.

MR. HERBERT: Next is a group of documents for Quadrapong which have been copied which I hand you.

MR. ANDERSON: I will have the Reporter mark the Quadrapong drawings you have handed me as Atari Deposition Exhibit 109.

(Documents relating to Quadrapong were marked Atari Exhibits 109-1 through 109-10 for Identification.)

MR. HERBERT: In addition to that group I also have another uncopyable original for Quadrapong. Please be careful with this one.

MR. ANDERSON: Q. Mr. Bushnell, the large rather torn drawing that Mr. Herbert has just laid before us bears a title block, "Syzygy." but no designer name or date and it's marked

1 Sheet 3 of 3, Quadrapong. When was that drawing made to the
2 best of your knowledge?

3 A. Oh, based on the address, I think we evacuated that building
4 in August of '73 so I'd say it was done prior to that. I'd say
5 probably sometime in the late spring, early summer.

6 Q. Of '73? Yes. I think we produced the game in late '73.

7 MR. ANDERSON: I don't think we will need a copy of
8 that drawing. It would be very difficult to copy, I think.

9 MR. HERBERT: Next I have some additional drawings for
10 Quadrapong. The first one is labeled "Schematic Quadrapong."

11 MR. ANDERSON: I will have the Reporter mark this
12 collection as Atari Deposition Exhibit 110.

13 (Group of documents for Quadrapong
14 was marked Atari Exhibits 110-1
through 110-7 for Identification.)

15 MR. ANDERSON: Q. Mr. Bushnell, I notice this has
16 the title block of Kee Games. Can you explain how that drawing
17 is in the files of Atari, Inc.?

18 A. Well, we have consolidated the files between the two
19 companies.

20 Q. Did you just merge the files physically?

21 A. Yes.

22 Q. Does Kee Games now exist or has it been dissolved?

23 A. It exists, but it's primarily an operating name, although
24 there's still a corporate entity.

25 Q. I also noticed on perhaps all of the drawings, at least
26 most of the drawings in Exhibit 108 which I will place before
27 you, the title block identification of Cyan Engineering. Who
28 is Cyan Engineering?

1 A. It's a code name for our research group.

2 Q. That is strictly an integral part of Atari, Inc.?

3 A. Yes.

4 MR. HERBERT: In addition I have another very badly
5 torn Quadrapong drawing which has not been able to be copied
6 and this is Sheet 2 of 3.

7 MR. ANDERSON: Q. Mr. Bushnell, was this large torn
8 drawing, Sheet 2 of 3, on the game Quadrapong on a paper with
9 the title block Syzygy also made in early 1973 to the best of
10 your knowledge? A. I believe so.

11 MR. ANDERSON: I don't believe we need a copy of that,
12 either, Tom.

13 MR. HERBERT: Next is a group of drawings for the
14 game Crash 'N Score.

15 MR. ANDERSON: I will have the Reporter mark that
16 collection of drawings on Crash 'N Score as Atari Deposition
17 Exhibit 111.

18 (Group of Documents relating to
19 Crash 'N Score was marked Atari
20 Exhibits 111-1 through 111-20 for
Identification.)

21 MR. HERBERT: The next group consists of drawings
22 relating to the game Gotcha.

23 MR. ANDERSON: I will have the Reporter mark the set
24 of drawings you have handed us and identified as relating to
25 Gotcha as Atari Deposition Exhibit 112, numbering each page.

26 (Group of Documents relating to
27 Gotcha was marked Atari Exhibits
28 112-1 through 112-17 for
Identification.)

1 MR. ANDERSON: Q. Mr. Bushnell, in Exhibit 112 in
2 the first page there is reference to, "P.C. Design, 3650 Charles
3 Street, Santa Clara." Who is P.C. Design?

4 A. Print Circuit Design.

5 Q. Is this a part of Atari?

6 A. No. That's a designation of what the drawing was. It was
7 a PC design.

8 Q. I see. I assumed that was a business entity.

9 A. No.

10 Q. Is the address an address of Atari? A. Yes.

11 Q. At the point in time when Exhibit 112-1 was made was
12 Syzygy located at 2962 Scott Boulevard?

13 A. We used the name Syzygy and Atari interchangeably for awhile.
14 We weren't sure whether we were going to call ourselves-- We
15 incorporated under the name Atari. We weren't sure whether we
16 were going to use that or continue operating under the dba
17 Syzygy.

18 Q. As of the date of the drawing Exhibit 112-1, which is
19 5/23/72, was Syzygy a separate operating company or was there
20 just one company calling itself either Atari or Syzygy?

21 A. One company, correct.

22 Q. I notice again at the bottom of the block in the lower
23 right-hand corner of Exhibit 112-1 a reference to, "Drawn: PC
24 Design." Is that again the title of the drawing or is that an
25 entity that prepared the drawing or someone who prepared the
26 drawing?

27 A. I don't know. But, you know,
28 all I can say is that someone was saying that's what it is.
It's a PC design. I mean, there's no one that I know with that

1 name and I know of no company of that name.

2 MR. HERBERT: In addition to those we have another
3 uncopyable, this particular item is a blueline, in the same
4 game Gotcha although I see no designation for that particular
5 name. There is a designation of Catch in the center of the
6 drawing.

7 MR. ANDERSON: I don't think we need a copy of that
8 blueprint or blueline, if that's what you prefer.

9 MR. HERBERT: The next is a group of drawings for
10 the Steeplechase.

11 MR. ANDERSON: The second one bears a label Astro Turf.

12 MR. HERBERT: Well, according to the note that was
13 apparently a code name.

14 Am I correct, Mr. Bushnell?

15 THE WITNESS: Correct.

16 MR. ANDERSON: Q. Astro Turf is a code name for
17 Steeplechase? A. Correct.

18 Q. One of them is labeled Fish. That was a code name for what?

19 MR. HERBERT: Jaws. As a matter of fact, there's two
20 fish drawings in this.

21 MR. ANDERSON: Yes, that is what I was referring to.

22 MR. HERBERT: I thought you were referring to the
23 earlier designation.

24 MR. ANDERSON: I will have the Reporter mark the
25 collection you have just handed me as Atari Deposition Exhibit
26 113 which includes the Fish drawings, the Astro Turf drawings
27 and one drawing on Steeplechase.

28 MR. HERBERT: The Astro Turf and Steeplechase are the

1 same game.

2 MR. ANDERSON: Yes, all right.

3 (Group of Documents above-described
4 were marked Atari Exhibits 113-1
5 through 113-8 for Identification.)

6 MR. HERBERT: I have another single drawing for
7 Arcade Race Track.

8 MR. ANDERSON: Q. Mr. Bushnell, is Arcade Race Track
9 a game that Atari made and sold?

10 A. That could have been the code name for Hiway.

11 Q. Do you know if it was the code name for Hiway? Can you
12 tell perhaps by looking at the single drawing which Mr. Herbert
13 has just handed me? A. No, I can't.

14 Q. Do you recognize the drawing as any that you are familiar
15 with? A. No, I don't.

16 MR. ANDERSON: I will have the Reporter mark this
17 single sheet as Atari Exhibit 114.

18 (Single sheet relating to Hiway
19 was marked Atari Exhibit 114 for
20 Identification.)

21 MR. HERBERT: Next is a group of drawings for the game
22 Stunt Cycle, Code name Evel Knievel.

23 MR. ANDERSON: Q. I notice just the word Evel,
24 E-v-e-l, on several of the drawings.

25 A. Right. Evel is short.

26 Q. It's a short code name? A. Yes.

27 Q. And the name of the game is? A. Stunt Cycle.

28 Q. Is Stunt Cycle a game that has been made and sold by Atari?

A. Yes.

Q. Was it sold under that name? A. Yes.

1 MR. HERBERT: That's one I will have to give you more
2 information on the name. It just came out.

3 MR. ANDERSON: Q. There is a drawing in this packet
4 which I will have the Reporter mark as Exhibit 115 with the
5 legend Slezey Shifter. Is Slezey Shifter a code name?

6 A. Yes. That was the precursor of Evel--we decided to upgrade
7 the image.

8 Q. Was it a precursor in name or was it a different game?

9 A. Well, the game goes through various evolutionary cycles.
10 I think the game when it was initially conceived was called
11 Slezey Shifter.

12 MR. ANDERSON: Please mark that as Exhibit 115, that
13 collection.

14 (Documents relating to Slezey
15 Shifter were marked Atari Exhibits
16 115-1 through 115-16 for
Identification.)

17 MR. HERBERT: Next I will hand you a group of drawings
18 for the game Qwak.

19 MR. ANDERSON: I will have the Reporter mark the
20 collection of drawings with respect to the game Qwak as Atari
21 Deposition Exhibit 116.

22 (Group of Documents relating to
23 Qwak was marked Atari Exhibits
24 116-1 through 116-26 for
Identification.)

25 MR. HERBERT: I have another uncopyable original for
26 the game Qwak which I hesitate to even unfold.

27 MR. ANDERSON: Q. Mr. Bushnell, do you know if this
28 drawing represents Qwak as it was made and sold?

1 A. No idea.

2 MR. HERBERT: I believe you already have drawings as
3 the game is made and sold. These are pre-production items that
4 you have asked for.

5 MR. ANDERSON: We do have drawings of Qwak as it was
6 made and sold. That's why I was asking the question. We won't
7 require a copy of that, Tom.

8 MR. HERBERT: The next is a group of drawings for the
9 game Rebound.

10 THE WITNESS: Code name Volley Ball.

11 MR. ANDERSON: I will have the Reporter mark the
12 collection of drawings relating to the game Rebound with a
13 code name Volley Ball as Atari Exhibit 117.

14 (Group of Documents relating to
15 Rebound was marked Atari Exhibits
16 117-1 through 117-7 for
Identification.)

17 MR. HERBERT: Next is a group of drawings for the game
18 World Cup, code name Soccer.

19 MR. ANDERSON: I will have the Reporter mark as Atari
20 Deposition Exhibit 118 the collection of drawings that you
21 have handed me as relating to World Cup, code name Soccer.

22 (Group of documents relating to
23 World Cup was marked Atari
24 Exhibits 118-1 through 118-10 for
Identification.)

25 MR. ANDERSON: Q. Mr. Bushnell, World Cup is a game
26 that was made and sold by Atari; is that correct?

27 A. Correct.

28 Q. The first document in Exhibit 118 is a graphic representation

1 of player images. Were such player images used in the World
2 Cup game that was made and sold by Atari?

3 A. On some of them. It was kind of in a couple of models.
4 Some people wanted the little men and some people didn't. It
5 represented additional cost. So it wasn't on all the machines.

6 Q. Are the two machines designated in a different way depend-
7 ing on whether or not they have the little men?

8 A. Actually what the situation was was that we were stuck with
9 an inventory and we put the little men on them to jazz it up a
10 little bit and see if we couldn't sell out, which we subsequently
11 did.

12 Q. You were stuck with an inventory of the game World Cup?

13 A. Yes. So all the ones we sold first didn't have it. The
14 ones that were sold later did.

15 Q. Then your prior testimony that it was a customer option,
16 is that--

17 A. Yes. I think that some of them ended up on the showroom
18 floors at the same time. But in that extent it was an option.

19 Q. Do you recall did Atari charge a different price for the
20 two World Cup games with or without player images?

21 A. I think it was to the point where we were willing to take
22 almost anything we could get.

23 Q. So that there was no specific price increment for the
24 player images in the World Cup?

25 A. No, not that I can remember.

26 MR. HERBERT: The next group of documents is an
27 additional set of drawings for the game World Cup, code name
28 Soccer.

1 MR. ANDERSON: I will have the Reporter mark the
2 additional set of drawings relating to World Cup, the top one
3 of which is dated 10/26/73, as Atari Deposition Exhibit 119.

4 (Group of documents relating to
5 World Cup was marked Atari
6 Exhibit 119-1 through 119-7 for
7 Identification.)

8 MR. HERBERT: The next group of documents which seems
9 to respond to your request are the engineering changes or draw-
10 ings. Actually the engineering changes just are responding to
11 your request as to what all the revisions to the drawings were.
12 So we have engineering changes for the various games and I think
13 we can just list them the same way we did the previous group.

14 MR. ANDERSON: All right.

15 MR. HERBERT: The first one is more than just engineer-
16 ing changes. There are also some drawings, revised drawings and
17 so forth. But the first set is for the game Pursuit.

18 MR. ANDERSON: I will have the Reporter mark that set
19 of engineering changes and drawings of Pursuit as Atari
20 Deposition Exhibit 120.

21 (Engineering Changes and Drawings
22 for Pursuit were marked Atari
23 Exhibits 120-1 through 120-35 for
24 Identification.)

25 MR. HERBERT: The next set is for the game Trak 10.

26 MR. ANDERSON: I will have the Reporter mark that set
27 of drawings as Atari Deposition Exhibit 121.

28 (Group of Drawings and Engineering
changes for Trak 10 was marked
Atari Exhibits 121-1 through 121-17
for Identification.)

1 MR. HERBERT: Next is a set for the game Gran Trak 10.

2 MR. ANDERSON: I will have the Reporter mark those
3 as Exhibit 122. These are engineering changes and drawings of
4 engineering changes, Mr. Herbert?

5 MR. HERBERT: Well, that's certainly what they appear
6 to be, yes. Mostly engineering changes and revised drawings.

7 (Engineering changes and revised
8 drawings for Gran Trak 10 was
9 marked Atari Exhibit 122-1 through
10 122-78 for Identification.)

11 MR. HERBERT: Next is for the game World Cup. I
12 believe this entire box of documents is the same general type
13 of thing and when we get off the engineering changes and
14 revised drawings I will say so for the record.

15 MR. ANDERSON: All right. Let me back up to Exhibit
16 122.

17 Q. Many of those drawings bear the title "Race Track." Is
18 that a code name, Mr. Bushnell? A. Yes, it is.

19 Q. For what game?

20 A. For the Trak series or Formula K if it's Kee.

21 Q. The code name Race Track was generic for Formula K or any
22 of the Atari Trak games?

23 A. It really was the basic architecture that all the rest of
24 them came from. I mean, it was the engineering project of Race
25 Track.

26 MR. ANDERSON: Which game is the subject of Exhibit 122,
27 Tom?

28 MR. HERBERT: GT-10.

MR. ANDERSON: And you said the next group that you

1 just handed me is World Cup?

2 MR. HERBERT: World Cup.

3 MR. ANDERSON: I will have the Reporter mark those
4 as Atari Deposition Exhibit 123.

5 (Engineering Drawings and changes
6 for World Cup were marked Atari
7 Exhibit 123-1 through 123-22 for
8 Identification.)

9 MR. HERBERT: The next is for the game Jet Fighter.

10 MR. ANDERSON: I will have the Reporter mark the set
11 of engineering changes and revised drawings of Jet Fighter as
12 Atari Deposition Exhibit 124.

13 (Engineering changes and Revised
14 Drawings for Jet Fighter were
15 marked Atari Exhibit 124-1 through
16 124-56 for Identification.)

17 MR. HERBERT: The next is another set for the game
18 Jet Fighter.

19 MR. ANDERSON: Q. Before going on, the first page of
20 Exhibit 124, Mr. Bushnell, has reference to a ground loop
21 condition on RF board. What is the RF board in Jet Fighter, if
22 you know? A. What is the what?

23 Q. The RF board in Jet Fighter?

24 A. It probably has to do with--we had to do some RF shielding
25 on some of our games to comply with FCC radiation problems.

26 Q. Was the RF shielding accomplished with a separate board of
27 some sort? A. Yes, it was.

28 Q. Were certain parts of the game put on that RF board to
comply with FCC requirements? A. No.

Q. What was the nature of the RF board?

A. The filter.

1 Q. A filter that is connected in certain circuits of the game?

2 A. Well, it's part of an interface with the board to the
3 outside world and it makes sure that certain frequencies are
4 not allowed to get out into the outside world.

5 Q. Is that interface from the game to the power line that's
6 providing the energy for the game?

7 A. Partially, yes.

8 Q. What other interfaces to the outside world are you con-
9 cerned with?

10 A. Controls to the TV set. It essentially isolates the
11 computer.

12 MR. ANDERSON: The next set, Mr. Herbert?

13 MR. HERBERT: It's another group for the same Jet
14 Fighter.

15 MR. ANDERSON: I will have the Reporter mark this
16 second set of engineering changes and revised drawings for
17 Jet Fighter as Atari Deposition Exhibit 125.

18 (Engineering changes and revised
19 drawings for Jet Fighter were
20 marked Atari Exhibits 125-1
through 125-45 for Identification.)

21 MR. HERBERT: The next is for the game Jaws.

22 MR. ANDERSON: I will have the Reporter mark this set
23 of drawings on Jaws' revisions as Atari Deposition Exhibit 126.

24 (Drawings and revisions on Jaws
25 were marked Atari Exhibits 126-1
through 126-29 for Identification.)

26 MR. HERBERT: Next is a set for the game Qwak.

27 MR. ANDERSON: I will have the Reporter mark the
28 engineering changes and revised drawings for Qwak as Atari

1 Deposition Exhibit 127.

2 (Engineering changes and revised
3 drawings for Qwak were marked
4 Atari Exhibits 127-1 through
127-61 for Identification.)

5 MR. HERBERT: The next set is for the game Doctor Pong.

6 MR. ANDERSON: Q. Mr. Bushnell, is Doctor Pong the
7 same circuitry as Pong? A. Yes.

8 Q. How does Doctor Pong differ from Pong?

9 A. A small cabinet designed for the waiting room of the
10 doctor's office.

11 MR. ANDERSON: I will have the Reporter mark the
12 revisions of Doctor Pong as Atari Deposition Exhibit 128.

13 (Engineering Changes and revisions
14 for Doctor Pong were marked Atari
15 Exhibit 128-1 through 128-23 for
Identification.)

16 MR. HERBERT: The next set is for the game Crossfire.
17 I will have some other documentation in this game for you.

18 MR. ANDERSON: Is Crossfire a new game?

19 MR. HERBERT: No.

20 MR. ANDERSON: Is it a code name?

21 THE WITNESS: No.

22 MR. HERBERT: No. We may have produced some documenta-
23 tion on it earlier. I just do not recall.

24 We have additional documentation on it today including
25 an operator's manual.

26 MR. ANDERSON: We have some service information as
27 Atari Deposition Exhibit 79 on Crossfire.

28 MR. HERBERT: Oh. Maybe what I have is a duplicate.

1 MR. ANDERSON: I will have the Reporter mark the
2 engineering changes and revised drawings for Crossfire as Atari
3 Deposition Exhibit 129.

4 (Engineering changes and revised
5 drawings for Crossfire were marked
6 Atari Exhibit 129-1 through 129-14
for Identification.)

7 MR. HERBERT: The next group is for the game Anti-
8 Aircraft.

9 MR. ANDERSON: What did you say these are, Tom?

10 MR. HERBERT: The same type of documents, but for the
11 game Anti-Aircraft.

12 MR. ANDERSON: I will have the Reporter mark the
13 changes and revised drawings for Anti-Aircraft as Atari
14 Deposition Exhibit 130.

15 (Engineering changes and revised
16 drawings for Anti-Aircraft were
17 marked Atari Exhibit 130-1 through
130-46 for Identification.)

18 MR. HERBERT: Now for the game Hiway with the code name
19 Arcade Driver.

20 MR. ANDERSON: I will have the Reporter mark that set
21 of drawings as Atari Deposition Exhibit 131, again numbering
22 them sequentially as far as it takes.

23 (Drawings for Hiway were marked
24 Atari Exhibits 131-1 through
131-24 for Identification.)

25 MR. WELSH: It is now 1 o'clock. Let's break for
26 lunch.

27 (Luncheon recess.)
28

1 AFTERNOON SESSION - TUESDAY, MARCH 2, 1976 - 2:15 p.m.

2 ---

3 MR. ANDERSON: All right, Mr. Herbert, shall we resume?

4 MR. HERBERT: We are going to continue, then, on this
5 group of documents. We are still in the area of engineering
6 changes and revised drawings.

7 I now hand you a set of such documents for the game
8 Tank.

9 MR. ANDERSON: Please mark them as Atari Deposition
10 Exhibit 132.

11 (Engineering changes and revised
12 drawings for the game Tank were
13 marked Atari Exhibit 132-1
through 132-25 for Identification.)

14 MR. HERBERT: Next is a set of the same sort of
15 documents for the game Indy 800.

16 MR. ANDERSON: Please mark them 133.

17 (Engineering changes and revised
18 drawings for Indy 800 were marked
19 Atari Exhibits 133-1 through
133-74 for Identification.)

20 MR. HERBERT: Next is a similar set of documents for
21 the game Outlaw.

22 MR. ANDERSON: Please mark them 134.

23 (Engineering changes and revised
24 drawings for Outlaw were marked
25 Atari Exhibits 134-1 through 134-30
for Identification.)

26 MR. HERBERT: Next is for the game Tank.

27 MR. ANDERSON: Please mark those 135.

28 (Engineering changes and revised

drawings for Tank were marked
Atari Exhibits 135-1 through
135-19 for Identification.)

MR. HERBERT: Next is for the game Cocktail World Cup.

MR. ANDERSON: Please mark them 136.

(Engineering changes and revised
drawings for the game Cocktail
World Cup were marked Atari
Exhibit 136-1 through 136-22 for
Identification.)

MR. HERBERT: Next is for the game Tank.

MR. ANDERSON: Please mark them 137.

(Engineering changes and revised
drawings for the game Tank were
marked Atari Exhibits 137-1
through 137-13 for Identification.)

MR. HERBERT: Next is for the game Pin Pong.

MR. ANDERSON: Please mark those 138.

(Engineering changes and revised
drawings for the game Pin Pong
were marked Atari Exhibits 138-1
through 138-32 for Identification.)

MR. HERBERT: Next is for the game Gran Trak 20.

MR. ANDERSON: Please mark those 139.

(Engineering changes and revised
drawings for the game Gran Trak 20
were marked Atari Exhibits 139-1
through 139-58 for Identification.)

MR. HERBERT: Next is for the game Crash 'N Score.

MR. ANDERSON: Please mark that group as Exhibit 140.

(Engineering changes and revised
drawings for the game Crash 'N
Score were marked Atari Exhibits
140-1 through 140-45 for
Identification.)

MR. HERBERT: Next is for Cocktail Pong.

1 MR. ANDERSON: Please mark those as Exhibit 141.

2 (Engineering changes and revised
3 drawings for Cocktail Pong were
4 marked Atari Exhibits 141-1
5 through 141-26 for Identification.)

6 MR. HERBERT: Next is for the game Steeplechase.

7 MR. ANDERSON: Please mark those 142.

8 (Engineering changes and revised
9 drawings for Steeplechase were
10 marked Atari Exhibits 142-1
11 through 142-51 for Identification.)

12 MR. HERBERT: Next is for the game Stunt Cycle.

13 MR. ANDERSON: Please mark those 143.

14 (Engineering changes and revised
15 drawings for Stunt Cycle were
16 marked Atari Exhibits 143-1
17 through 143-26 for Identification.)

18 MR. HERBERT: Next is for the game Twin Racer.

19 MR. ANDERSON: Please mark those 144.

20 (Engineering changes and revised
21 drawings for the game Twin Racer
22 were marked Atari Exhibits 144-1
23 through 144-26 for Identification.)

24 MR. HERBERT: Next is for the game Rebound.

25 MR. ANDERSON: Please mark those 145.

26 (Engineering changes and revised
27 drawings for the game Rebound
28 were marked Atari Exhibits 145-1
through 145-15 for Identification.)

MR. HERBERT: The next group of documents is somewhat similar but in addition to the change notices and revised drawings it also includes parts lists in some areas.

MR. ANDERSON: Are those revised parts lists or original parts lists?

1 MR. HERBERT: Well, for instance, the first one I look at
2 which is related to the game Tank has Revision J on the first sheet.

3 MR. ANDERSON: Mark those as Exhibit 146.

4 (Change Notices, Revised Drawings
5 and Parts Lists for the game Tank
6 were marked Atari Exhibits 146-1
7 through 146-42 for Identification.)

8 MR. HERBERT: Next is with respect to the game Quadrapong.

9 MR. ANDERSON: Mark that 147.

10 (Engineering changes and revised
11 drawings for the game Quadrapong
12 were marked Atari Exhibits 147-1
13 through 147-20 for Identification.)

14 MR. HERBERT: Next is for the game Formula K.

15 MR. ANDERSON: Mark that Exhibit 148.

16 (Engineering changes and revised
17 drawings for the game Formula K
18 were marked Atari Exhibits 148-1
19 through 148-21 for Identification.)

20 MR. HERBERT: Next is for the game Gotcha.

21 MR. ANDERSON: Mark that 149.

22 (Engineering changes and revised
23 drawings for the game Gotcha
24 were marked Atari Exhibits 149-1
25 through 149-17 for Identification.)

26 MR. ANDERSON: Next is for the game Color Gotcha.

27 MR. ANDERSON: Mark that 150.

28 (Engineering changes and revised
drawings for Color Gotcha were
marked Atari Exhibits 150-1
through 150-9 for Identification.)

MR. HERBERT: Next is for the game Pong Doubles.

MR. ANDERSON: Mark that 151.

(Engineering changes and revised
drawings for the game Pong Doubles
were marked Atari Exhibits 151-1
through 151-10 for Identification.)

MR. HERBERT: Next is for the game Pong.

1 MR. ANDERSON: Mark that 152.

2 (Engineering changes and revised
3 drawings for the game Pong were
4 marked Atari Exhibits 152-1
5 through 152-26 for identification.)

6 MR. HERBERT: Next is for the game Elimination.

7 MR. ANDERSON: Mark that 153.

8 (Engineering changes and revised
9 drawings for the game Elimination
10 were marked Atari Exhibits 153-1
11 through 153-10 for Identification.)

12 MR. HERBERT: Next is for the game Spike.

13 MR. ANDERSON: Mark that 154.

14 (Engineering changes and revised
15 drawings for the game Spike were
16 marked Atari Exhibits 154-1
17 through 154-13 for Identification.)

18 MR. HERBERT: Here again we go back to the early draw-
19 ings of various games.

20 MR. ANDERSON: That is the end of revisions and
21 change drawings?

22 MR. HERBERT: As far as I know. There may still be
23 some, but I don't think so. I think that's the end of it.

24 Now we have some early drawings with respect to the
25 game Super Pong.

26 MR. ANDERSON: Mark those 155.

27 (Early drawings for the game Super
28 Pong were marked Atari Exhibits
155-1 through 155-5 for Identifi-
cation.)

MR. HERBERT: Here are some more early drawings for
the game Space Race.

1 MR. ANDERSON: Mark that 156.

2 (Early drawings for Space Race
3 were marked Atari Exhibits 156-1
4 through 156-29 for Identification.)

5 MR. HERBERT: The next series of documents are what we
6 designate as game files for various games. We do have quite a
7 few of them. They include by way of example the first one I
8 hand you on World Cup.

9 MR. ANDERSON: Have you already run four copies of
10 each of these?

11 MR. HERBERT: Yes. They include product specifications
12 and some early sketches and memos, notes. I think generally
13 a miscellaneous background of many of the games. It's just
14 broadly classified for purposes of identification "Game Files."

15 The first such game file is for the game World Cup.

16 MR. ANDERSON: Mark that 157.

17 (Game file for the game World Cup
18 was marked Atari Exhibit 157-1
19 through 157-62 for Identification.)

20 MR. HERBERT: Next is for the game Tank.

21 MR. ANDERSON: Mark that 158.

22 (Game file for the game Tank was
23 marked Atari Exhibit 158-1
24 through 158-71 for Identification.)

25 MR. ANDERSON: Just thumbing through the stapled set
26 in each of the first two cases there doesn't seem to be a
27 chronological pattern. Is there any pattern to the order of
28 the documents within the group?

MR. HERBERT: Not that I am aware of, Mr. Anderson.
There may be one, but I am not aware of it.

MR. ANDERSON: Q. Mr. Bushnell, do you know if there

1 is? A. I think these are just the files that were
2 kept in engineering relating to some of the correspondence or
3 changes or requests and that sort of thing. I think they were
4 just shoved into the files. I don't believe that there's any
5 order or intelligence to them.

6 MR. HERBERT: The next is for the game Jet Fighter. I
7 hand that to you in a manila folder which may be discarded.
8 It's just a matter of keeping the various items assembled.

9 MR. ANDERSON: The folder is marked one of four.

10 MR. HERBERT: Yes.

11 MR. ANDERSON: I will ask the Reporter to mark that
12 159.

13 MR. HERBERT: The folder, your particular folder, is
14 marked one of four. The other copies are marked two, three and
15 four of four. It's a copying thing. The folder is not meant
16 to be part of the exhibit, I don't believe, merely something to
17 hold it together.

18 MR. ANDERSON: Oh, I see.

19 (Game file for the game Jet Fighter
20 was marked Atari Exhibits 159-1
through 159-218 for Identification.)

21 MR. ANDERSON: Q. May I interrupt just to ask a
22 question about Exhibit 158?

23 Mr. Bushnell, in Exhibit 158 one of the pages is dated
24 15 July 1975 and it's a memo to engineering staff, marketing,
25 from Steve Bristow, subject: staff meeting and game reviews.
26 Is it the policy of Atari to have regular staff meetings?

27 A. Sure.

28 Q. Are reports prepared on those staff meetings normally?

1 A. Sometimes they are. Sometimes they aren't. It depends on
2 whether there's something that needs to be disseminated
3 internally.

4 Q. Are those staff meeting notes and minutes kept in any parti-
5 cular place? A. No.

6 Q. Does Mr. Bristow keep a file of staff meeting notes, do you
7 know? A. I doubt it.

8 Q. Is there a group within the company identified as the staff
9 for purposes of meetings of this kind?

10 A. Well, yes.

11 Q. Who is in that group?

12 A. It's all the vice-presidents. Well, you know, staff meet-
13 ings are kind of funny things. I mean, the engineering staff
14 and there's, you know, the management staff. The staff meeting
15 we talk about is always Friday afternoon everybody gets together
16 and hollers at each other.

17 Q. Is that a regular Friday afternoon meeting?

18 A. Did I say Friday. I meant Monday afternoon. I'm sorry.

19 Q. Does someone formally keep a record of what happens at the
20 staff meeting? A. No.

21 Q. Is it sometimes done as in the case of the July 15, 1975
22 memo, part of Exhibit 158?

23 A. I guess sometimes it is.

24 Q. You don't know if they are filed separately?

25 A. No. I know that there isn't any consistent cohesive record-
26 ing of staff meeting things. Notice that's to the engineering
27 staff. It's probably something he thought was discussed that
28 should be disseminated to his people.

1 Q. And marketing also I guess that's true, to marketing?

2 A. Right.

3 MR. ANDERSON: All right, Mr. Herbert.

4 MR. HERBERT: The next one is for the game GT-20.

5 MR. ANDERSON: Mark that 160.

6 (Game file for the game GT-20 was
7 marked Atari Exhibits 160-1
through 160-91 for Identification.)

8 MR. HERBERT: I have made a note for the record that
9 in addition to the manila folder for Exhibit 159 there is a
10 marking in red felt pen on some of the copies which is not
11 meant to be part of the exhibit, but merely an identification
12 in getting the documents together.

13 The next is for the game Indy 800.

14 MR. ANDERSON: I will have that marked as 161.

15 (Game file for Indy 800 was marked
16 Atari Exhibits 161-1 through
161-177 for Identification.)

17 MR. HERBERT: The next is for the game Anti-Aircraft.

18 MR. ANDERSON: Mark that 162.

19 (Game file for Anti-Aircraft was
20 marked Atari Exhibit 162-1
through 162-52 for Identification.)

21 MR. HERBERT: The next is for the game Computer Space.

22 MR. ANDERSON: Mark that Exhibit 163.

23 (Game file for Computer Space was
24 marked Atari Exhibits 163-1
through 163-31 for Identification.)

25 MR. HERBERT: The next is for the game Crash 'N Score.

26 MR. ANDERSON: Mark that 164.

27 (Game file for Crash 'N Score was
28 marked Atari Exhibits 164-1
through 164-4 for Identification.)

1 MR. HERBERT: Next is for the game Steeplechase.

2 MR. ANDERSON: Mark that 165.

3 (Game file for Steeplechase was
4 marked Atari Exhibit 165-1
through 165-37 for Identification.)

5 MR. HERBERT: Next is for the game Stunt Cycle.

6 MR. ANDERSON: Mark that 166.

7 (Game file for Stunt Cycle was
8 marked Atari Exhibit 166-1 through
166-34 for Identification.)

9 MR. HERBERT: Code name Evel Knievel.

10 The next one is for the game Crossfire.

11 MR. ANDERSON: Mark that 167.

12 (Game file for Crossfire was
13 marked Atari Exhibits 167-1
through 167-50 for Identification.)

14 MR. HERBERT: Next is for the game Qwak.

15 MR. ANDERSON: Mark that 168.

16 (Game file for the game Qwak was
17 marked Atari Exhibits 168-1
through 168-24 for Identification.)

18 MR. HERBERT: Next is for the game pursuit.

19 MR. ANDERSON: Mark that 169.

20 (Game file for Pursuit was marked
21 Atari Exhibits 169-1 through
169-3 for Identification.)

22 MR. HERBERT: Next is for the game Gotcha.

23 MR. ANDERSON: Mark that 170.

24 (Game file for Gotcha was marked
25 Atari Exhibits 170-1 through
170-24 for Identification.)

26 MR. HERBERT: Next is for the game Jaws.

27 MR. ANDERSON: Mark that 171.

28 (Game file for the game Jaws was
marked Atari Exhibits 171-1
through 171-28 for Identification.)

1 MR. HERBERT: Next is for the game Pin Pong.

2 MR. ANDERSON: Mark that 172.

3 (Game file for Pin Pong was marked
4 Atari Exhibits 172-1 through 172-56
for Identification.)

5 MR. HERBERT: The next one is for Color Gotcha.

6 MR. ANDERSON: Mark that 173.

7 (Game file for Color Gotcha was
8 marked Atari Exhibits 173-1 through
173-17 for Identification.)

9 MR. HERBERT: The next game is Twin Racer.

10 MR. ANDERSON: Mark that 174.

11 (Game file for Twin Racer was
12 marked Atari Exhibits 174-1 through
174-2 for Identification.)

13 MR. HERBERT: Next is for the game Rebound.

14 MR. ANDERSON: Mark that 175.

15 (Game file for Rebound was marked
16 Atari Exhibits 175-1 through 175-32
for Identification.)

17 MR. HERBERT: The next is for Cocktail Pong.

18 MR. ANDERSON: Mark that 176.

19 (Game file for Cocktail Pong was
20 marked Atari Exhibits 176-1 through
176-21 for Identification.)

21 MR. HERBERT: Next is for Pong.

22 MR. ANDERSON: Mark that 177.

23 (Game file for Pong was marked
24 Atari Exhibits 177-1 through 177-5
for Identification.)

25 MR. HERBERT: Next is for Gran Trak 10.

26 MR. ANDERSON: Mark that 178.

27 (Game file for Gran Trak 10 was
28 marked Atari Exhibits 178-1 through
178-251 for Identification.)

1 MR. HERBERT: The next is for Space Race.

2 MR. ANDERSON: Mark that 179.

3 (Game file for Space Race was
4 marked Atari Exhibits 179-1 through
179-22 for Identification.)

5 MR. HERBERT: The next is for Super Pong.

6 MR. ANDERSON: Mark that 180.

7 (Game file for Super Pong was
8 marked Atari Exhibits 180-1 through
180-5 for Identification.)

9 MR. HERBERT: Next is for Elimination.

10 MR. ANDERSON: Mark that 181.

11 (Game file for Elimination was
12 marked Atari Exhibits 181-1 through
181-4 for Identification.)

13 MR. HERBERT: The next is Doctor Pong.

14 MR. ANDERSON: Mark that 182.

15 (Game file for Doctor Pong was
16 marked Atari Exhibits 182-1 through
182-9 for Identification.)

17 MR. HERBERT: Next is Quadrapong.

18 MR. ANDERSON: Mark that 183.

19 (Game file for Quadrapong was
20 marked Atari Exhibits 183-1 through
183-14 for Identification.)

21 MR. HERBERT: Next is Pong Doubles.

22 MR. ANDERSON: Mark that 184.

23 (Game file for Pong Doubles was
24 marked Atari Exhibits 184-1 through
184-22 for Identification.)

25 MR. HERBERT: I believe that takes care of that
26 category.

27 The next group of material we have is kind of an
28 intermixture engineering memos and they are all quite current.

1 They include a statement here or there about existing games.
2 But they also include quite a bit of material on games that
3 have not really gone beyond the conception stage and to those
4 which are somewhere in between conception and production. They
5 are game proposals or concepts, you might say. I don't think
6 that would be included here.

7 MR. ANDERSON: What is the earliest date?

8 MR. HERBERT: The earliest date?

9 THE WITNESS: The earliest one I see is 1974. Most of
10 these are '75 and '76. Late '74.

11 MR. ANDERSON: Is there anything in those files
12 relating to games that have been made and sold?

13 MR. HERBERT: Yes, there is, but it's intermixed is
14 what I'm saying.

15 THE WITNESS: If they have been made and sold it's
16 been sold within the last six months.

17 MR. HERBERT: Now, we say made and sold. I see
18 several sheets here that have nothing on them at all about
19 present games.

20 MR. ANDERSON: Q. Are there any statements in any
21 of those documents with respect to the desirable characteristics
22 of a game?

A. The what?

23 Q. The desirable characteristics of a game from the user's
24 point of view or the manufacturing point of view?

25 MR. HERBERT: Of any game, you mean?

26 MR. ANDERSON: Q. Well, a video game. A game using
27 a CRT display.

28 A. No. It's more factual concepts of what the game is. No

1 quantitative judgments as to why the game is defined in a
2 certain way.

3 Q. Or qualitative? A. Qualitative is what I meant.

4 Q. Well, I think that we would agree that you could eliminate
5 from those two folders anything that's relating to plans for
6 future games that are specific about some future proposed game
7 that does not include any statement concerning the objectives
8 of a game, the desirable characteristics of a game in its
9 design. If it does that I think we want it. If it relates to
10 an existing game I think you can't be hurt by producing it and
11 we consider it relevant.

12 A. We'll have to produce this later because it's so inter-
13 spersed. You know, it's like we've got an Anti-Aircraft, you
14 know, which has been produced and that's that much of the sheet
15 (indicating), and then the rest of it are items which have not
16 been produced.

17 MR. HERBERT: Since you have already indicated that
18 you don't propose to read this in detail here can we provide
19 you with copies of this file expurgated as you have indicated?
20 We can assign it the next exhibit number if you like.

21 MR. ANDERSON: Is it just one folder? I thought it
22 was two.

23 MR. HERBERT: Well, no. I had four copies of this
24 folder is what it amounts to. But there's more to it than that
25 because we also have engineering weekly reports. Again, engi-
26 neering reports are reports on what is being done in engineering.
27 It's not broken down by game. One report talks about twelve
28 different things, some of which aren't even games, but much less

1 video games or video games that have been produced.

2 MR. ANDERSON: It could be relevant even though it
3 doesn't refer to a game, too, depending on what it says, if it
4 might bear on issues in this litigation. We are willing to let
5 you make a sort, as I have indicated. If that is agreeable we
6 will designate the first folder you picked up which I think you
7 said is entitled "Engineering Memos" as 185.

8 MR. HERBERT: All right. The folder is entitled,
9 "Engineering Memos on (1) New Game Proposals, (2) Schedules,
10 (3) Assignments and (4) Game Reviews." I would say assignment
11 is not assigned in a legal sense, but pointing.

12 The second folder, these are engineering weekly reports.
13 This first one I have run across is entitled, "Most Recent and
14 October '74 Back."

15 MR. ANDERSON: How far back do they go?

16 THE WITNESS: January 4th, '73.

17 MR. HERBERT: At least that's what is on the back page
18 and they seem to be in chronological order.

19 MR. ANDERSON: Q. Are they approximately weekly from
20 January of '73 on? A. It looks like it.

21 Q. Was a new policy started in January of '73 to prepare
22 weekly engineering reports, Mr. Bushnell?

23 MR. HERBERT: I will say this, that that is not exactly
24 true. The first one I see is January 4, '73. The next one I
25 see is December 10, '73, and then December 14, '73.

26 THE WITNESS: I think it was kind of a hit-and-miss
27 proposition. They do get more periodic as they get closer into
28 late '73.

1 MR. ANDERSON: I suggest you make the same sort and
2 we'll mark it as Exhibit 186.

3 MR. HERBERT: Even in the beginning of '74 they are
4 not weekly.

5 The title of this file is, "Engineering Weekly Reports
6 (Recent and October '74 back)."

7 MR. ANDERSON: That seems to be the same heading that
8 you read for 186, except the word "most" was in there, "most
9 recent."

10 MR. HERBERT: I'm sorry. I'm talking about 186. I
11 didn't realize I had given you the heading before.

12 MR. ANDERSON: Oh. That is 186. All right.

13 MR. HERBERT: I have another set of files in the same
14 category called "Grass Valley Weekly Reports."

15 MR. ANDERSON: Grass Valley, G-r-a-s-s?

16 MR. HERBERT: Yes.

17 MR. ANDERSON: We will mark those 187.

18 Q. Mr. Bushnell, what does Grass Valley refer to?

19 A. The Cyan Engineering group.

20 Q. Is that synonymous, Grass Valley and Cyan Engineering?

21 A. Yes. Cyan Engineering is located in Grass Valley,
22 California.

23 MR. HERBERT: We also have two folders, and I'm not
24 sure whether these were identified at the last session. They
25 are certainly here. But along the same categories we have just
26 talked about. One is labeled, "Atari Engineering - Weekly
27 Status Report." Include that in the same category and call it
28 188.

1 MR. ANDERSON: Yes, you can make the same sort. If
2 there are games that have not yet been cleared for production
3 and there are documents relating to those we will agree that you
4 don't have to produce them unless they have statements concern-
5 ing the desirability of any game or game feature, then we want
6 to see them.

7 MR. HERBERT: Well, I don't know what you mean by the
8 desirability of any game or game feature. The fact that they
9 say the game should be in a cabinet and the cabinet is going to
10 have such a height I assume there's some inference at least
11 that that's desirable somewhat. I don't know quite what you
12 mean by that.

13 MR. ANDERSON: Well, I think functional feature-- Yes.
14 If it says something referring to the desirability of a parti-
15 cular characteristic of a game such as movable people up and
16 down or movable people right and left or a movable playing
17 piece that's hit or anything of that sort.

18 THE WITNESS: Are you guy's trying to design a better
19 game or win a lawsuit?

20 MR. HERBERT: I don't know what is in here along that
21 line. I will be able to make a better identification. I think
22 perhaps we're talking in a vacuum now.

23 MR. ANDERSON: I think you are creating the problem.
24 We have a protective order. I see no reason why we as lawyers
25 can't look at these documents.

26 MR. HERBERT: Our protective order is not limited to
27 lawyers I don't believe. We can perhaps do something like that
28 and maybe we can work out something. Once I see what it is that

1 we have in here and what you really mean by features that are
2 desirable. I can't imagine any sheet in here not having some
3 feature that's got to be at least inferred to be desirable or
4 they wouldn't want it in their game otherwise.

5 MR. ANDERSON: I think the problem is that you have not
6 yet had a chance to look at these files and I think if you will
7 do that and consider letting us look at them in their entirety
8 subject to the protective order and indicating to you which
9 ones we think we must have and are relevant, that's probably
10 the best way to proceed. If you refuse to do that then I will
11 consider letting you make the sort.

12 MR. HERBERT: Let us take a better look at this thing
13 and identify the other file that was produced last time, but
14 not marked, and that is entitled--

15 MR. ANDERSON: Wait. This will be 188, the one you
16 just read into the record, "Atari Engineering Weekly Status
17 Report"?

18 MR. HERBERT: Correct.

19 MR. ANDERSON: What is the earliest report in that
20 file?

21 MR. HERBERT: September 9, 1974. That is the back
22 sheet which seems to be the earliest.

23 The next file is entitled, "Atari, Weekly Status
24 Report - Cyan."

25 Do you want to call that 189?

26 MR. ANDERSON: Mark that 189.

27 (Atari Exhibit Numbers 185 through
28 189 are reserved for the above-
described four file folders.)

1 MR. HERBERT: Since our last session I have become
2 aware of a brand new game called Stunt Cycle. We asked for
3 the documentation on that including operations, maintenance
4 and service manual, and further including a loose sheet inside
5 entitled, "Addenda to Service Manual."

6 MR. ANDERSON: Mark that 190 and the loose sheet as
7 190-A.

8 (Operation, Maintenance and Service
9 Manual for the game Stunt Cycle was
10 marked Atari Exhibit 190 for
11 Identification.)

12 (Loose sheet entitled "Addenda to
13 Service Manual" relating to the
14 game Stunt Cycle was marked Atari
15 Exhibit 190-A for Identification.)

16 MR. ANDERSON: Mr. Herbert, is it my understanding
17 that none of the operation, maintenance and service manuals
18 such as Exhibit 190, the Stunt Cycle service manual, is under
19 the protective order, but that they are publicly available?

20 MR. HERBERT: It's not only your understanding, but
21 it's also correct. No, they are not under the protective order.

22 We have some additional pre-production material on
23 the Pong game including not only Pong but also VP-1 which was
24 Space Race including a memorandum dated May 31, 1973.

25 MR. ANDERSON: Mark that 191.

26 (Above-described document was
27 marked Atari Exhibit No. 191 for
28 Identification.)

MR. HERBERT: A drawing entitled "Pong Version No. 1,
Drawing No. 000825."

MR. ANDERSON: I will mark that Exhibit 192.

(Pong Version No. 1, Drawing No.
00825 was marked Atari Exhibit 192
for Identification.)

1 MR. HERBERT: And another drawing entitled "Block
2 Diagram, Pong."

3 MR. ANDERSON: Mark that 193.

4 (Block diagram, Pong was marked
5 Atari Exhibit 193 for Identifica-
tion.)

6 MR. ANDERSON: Q. Mr. Bushnell, where were those
7 documents 192 and 193 found, do you know?

8 A. It says "History Prints." Somewhere in the bowels of Atari.
9 I don't know.

10 Q. Were they in a particular file or Atari?

11 A. Probably in the history file. Otherwise it probably
12 wouldn't have that marking on it. It might have been in Al's
13 private file.

14 Q. Is the history file broken down into sub categories under
15 history? A. I don't know.

16 Q. Is there a folder for Pong history?

17 A. I doubt it.

18 Q. How large is the history file at Atari?

19 A. I don't know.

20 Q. Do you know if it's more than a file drawer?

21 A. No, I don't. I haven't seen it for a long time.

22 Q. Well, when you last saw it was it broken down into any
23 sub categories under history? A. I don't remember.

24 MR. HERBERT: Next is a group of sketches which can be
25 characterized as sketches of Space Race.

26 MR. ANDERSON: I will have those marked 194.

27 (Sketches for the game Space Race
28 were marked Atari Exhibit No. 194-1
through 194-90 for Identification.)

1 MR. HERBERT: In the earlier session mention was made
2 of a Miratel monitor. We did not bring the monitor itself. It
3 seems to be in use. We did bring a single photograph of it.

4 THE WITNESS: You can come and inspect it any time you
5 wish.

6 MR. ANDERSON: We will mark the photograph as
7 Exhibit 195.

8 MR. HERBERT: We do not have copies of that photo-
9 graph. It appears to be a Poloroid. Is it?

10 THE WITNESS: Yes.

11 MR. HERBERT: It makes copying rather difficult with
12 no negative.

13 (Photograph was marked Atari
14 Exhibit No. 195 for Identification.)

15 THE WITNESS: The first Computer Space rocket ship
16 flew on that screen.

17 MR. HERBERT: You might note there is an indication
18 on the sheet that this Miratel monitor, Model No. L-3ME,
19 Serial No. 6456 with a question mark. Apparently it could not
20 be fully read.

21 MR. ANDERSON: I take it that legend was typed on
22 the paper recently in connection with this collection.

23 MR. HERBERT: Yes.

24 THE WITNESS: Yes.

25 MR. HERBERT: I think the photograph was taken recently
26 in connection with this collection.

27 The next set of documents I have relate to Nutting
28 Associates. There are three such documents. The first is the

1 agreement on this first page dated 14 July 1971, and on
2 Page 4 dated August 23, 1971.

3 MR. ANDERSON: We will mark that 196.

4 (Documents relating to Nutting
5 Associates were marked Atari
6 Exhibits 196-1 through 196-4 for
7 Identification.)

8 MR. HERBERT: The next document is a sheet headed
9 "Computer Space."

10 MR. ANDERSON: Mark that 197.

11 (Sheet headed "Computer Space" was
12 marked Atari Exhibit No. 1974 for
13 Identification.)

14 MR. ANDERSON: Q. Mr. Bushnell, did you prepare the
15 text of Exhibit 197?

16 A. I think I helped in it. I think most of it was done by
17 Dave Ralston.

18 Q. Do you know when it was prepared?

19 A. It was prior to the MOA show in '71. I'd say probably
20 September.

21 Q. Of 1971?

22 A. Yes.

23 MR. HERBERT: The next is a packet of documents whose
24 relationship was not at all clear to me, but they are stapled
25 together. The top document is the first page of a letter dated
26 January 27, 1972 on Syzygy Company letterhead addressed to
27 Mr. William Nutting.

28 MR. ANDERSON: We will mark that 198, and mark each
page, if you will.

(Various documents were marked
Atari Exhibit 198-1 through 198-12
for Identification.)

1 MR. HERBERT: I have another set of documents, the
2 first of which is entitled, "Subjective Quality Test of Digital
3 Video Tests run at a specific time and date."

4 MR. ANDERSON: Mark that 199.

5 (Group of documents was marked
6 Atari Exhibits 199-1 through 199-10
for Identification.)

7 MR. HERBERT: The next document is a sketch entitled
8 "Two-ton Oscillator," and dated April 19, 1971.

9 MR. ANDERSON: Mark that 200.

10 (Sketch of Two-Tone Oscillator
11 dated April 19, 1971 was marked
12 Atari Exhibit No. 200 for
Identification.)

13 MR. ANDERSON: Q. To try to take care of some of these
14 things as we move along and perhaps avoid time later,
15 Mr. Bushnell, Exhibit 194 appears to be primarily copied from
16 pages of a spiral or looseleaf binder of some sort. Is that a
17 fact?

A. I don't know.

18 MR. ANDERSON: Do you have the original here,
19 Mr. Herbert?

20 MR. HERBERT: No, I do not.

21 MR. ANDERSON: Was this part of a book?

22 MR. HERBERT: I would have to agree with your
23 observations. It certainly appears that way.

24 MR. ANDERSON: Q. Do you recognize the handwriting,
25 Mr. Bushnell?

A. It looks like Alcorn.

26 Q. Does he keep a book such as that?

27 A. I don't know. If he does you've got a copy of it right
28 here.

1 Q. Well, that would be the question I would like to ask of you:
2 If that is a bound book, do we have a copy of every page?

3 MR. HERBERT: It certainly is not totally a bound book.
4 There are obviously some--

5 MR. ANDERSON: I said a part of the exhibit is
6 apparently from a bound book. I recognize there were some
7 miscellaneous drawings at the back.

8 MR. HERBERT: Some of it appears to be bound and some
9 of it appears to be three-ring.

10 MR. ANDERSON: Q. Well, I think the bound book has
11 three-ring holes in it also.

12 A. Yes. See here we have the book (indicating). I can't
13 really give you any idea as to what it's all about. I don't
14 know. You will have to talk to Mr. Alcorn about that.

15 MR. HERBERT: The next item is a sketch entitled
16 "Television Transmitter Channel 4" dated 5/9/72.

17 MR. ANDERSON: Mark that 201.

18 (Sketch "Television Transmitter"
19 dated 5/9/72 was marked Atari
Exhibit 201 for Identification.)

20 MR. ANDERSON: Q. Mr. Bushnell, are you familiar with
21 Exhibit 201? A. Yes, I am.

22 Q. You have seen it before? A. Yes.

23 Q. Who drew it? A. Mr. Ted Dabney.

24 Q. When did he draw it?

25 A. It says 5/9/72.

26 Q. Are you aware of the event that caused him to prepare that
27 drawing? A. Yes. I wanted to be able to carry

28 a machine with me without a TV set hooking it directly in, and

1 so I wanted to be able to hook it into a regular standard broad-
2 cast television set. So I asked Ted to design me a little
3 transmitter.

4 Q. You said you wanted to be able to carry a machine with you?

5 A. Well, a computer.

6 Q. Specifically what machine? Did you have a piece of equip-
7 ment at that time that you wanted to be able to carry with
8 you somewhere? A. Yes.

9 Q. Specifically what was that piece of equipment?

10 A. I think it was the Pong game when I wanted to take it back
11 to Chicago.

12 Q. The circuit boards for the Pong game?

13 A. Yes. Prototype.

14 Q. Was that prototype packaged up in some way?

15 A. No. I think it was put in a metal can. Just a Budd chassis.

16 Q. That is Budd with a capital "B", I guess, a manufacturer?

17 A. Yes.

18 Q. In the Budd chassis there was a circuit board for the
19 controls for the Pong game? A. Right.

20 Q. Were there manual controls in that same Budd chassis?

21 A. Yes.

22 Q. Was there a speaker in the Budd chassis? A. Yes.

23 Q. Then how was that connected to a TV set in the model that
24 you took to Chicago?

25 A. It paired to a--I think we had a piece of twin lead with
26 a clothespin.

27 Q. Was that connected right to the television antenna?

28 A. Right.

1 Q. Was this circuit shown in Exhibit 201 incorporated into
2 that Budd chassis as a TV transmitter?

3 A. Yes, it was.

4 Q. So that the information that was generated in the Pong
5 board was in some way applied to the circuit shown in
6 Exhibit 201; is that correct? A. Correct.

7 Q. On what lead or input in Exhibit 201 was that Pong
8 information applied?

9 A. I think it was the thing called video-in.

10 Q. At the bottom of the circuit diagram in Exhibit 201?

11 A. Right.

12 Q. Was that used for your demonstration in Chicago in the
13 summer of '72? A. I believe it was.

14 Q. Did you make more than one of the transmitters shown in
15 Exhibit 201? A. Yes, I think we did. I think we
16 made several.

17 Q. How many? A. 10 or 15 or 20.

18 Q. Were they put to some use?

19 A. Yes. We kind of tested to see if there was a marketplace
20 for a consumer product.

21 Q. When did you make that consumer product test with the 10 or
22 15 TV transmitters connected up to Pong?

23 A. I don't really remember. Subsequent to that time.

24 Q. Sometime after the summer of '72? A. Yes.

25 Q. How did you make the market test?

26 A. We kind of put one together and asked people if they thought
27 they'd buy it for the price.

28 Q. When you say you put it together--

1 A. In Budd Chassis.

2 Q. In a consumer product prototype form?

3 A. No. It was pretty schlocky.

4 Q. What was the price that you used for that market survey?

5 A. \$200.

6 Q. Did that include a TV set?

A. No.

7 Q. Are there any documents other than Exhibit 201 relating to
8 the Pong game without a TV set, but with a television trans-
9 mitter?

A. No.

10 Q. Do you know of any other document at all relating to that
11 subject?

A. I tried to find one of the units.
12 I think there's one kicking around somewhere, but I haven't
13 been able to find it.

14 Q. Are there any documents on the market test that you
15 referred to?

A. No. We didn't do-- It was
16 a market test in kind of a name only.

17 MR. ANDERSON: All right. Go on, Mr. Herbert.

18 MR. HERBERT: Okay. The next document I have is a
19 sketch entitled "Coin-Operated Latch" dated 5/10/72.

20 MR. ANDERSON: Mark that 202.

(Sketch "Coin-Operated Latch"
21 dated 5/10/72 was marked Atari
22 Exhibit No. 202 for Identification.)

23 MR. HERBERT: The next document I have is a three-page
24 document. On the top line is, "Game Name: Steeplechase."

25 MR. ANDERSON: Mark that 203.

(Three-page document relating to
26 Steeplechase was marked Atari
27 Exhibits 203-1 through 203-3 for
28 Identification.)

1 MR. ANDERSON: Mr. Herbert, I asked a few questions
2 about Exhibit 194 which includes Mr. Alcorn's notebook. We
3 would like to see Mr. Alcorn's original notebook.

4 MR. HERBERT: The next item we have is a manual
5 entitled "G.E. #25MB, Color Monitor Troubleshooting Manual for
6 Indy 800 and similar games."

7 MR. ANDERSON: Mark that 204.

8 MR. HERBERT: This I don't believe pertains to a game
9 or describes a game. It is apparently for the monitor itself.

10 (Above-described manual was marked
11 Atari Exhibit No. 204 for Identifi-
cation.)

12 MR. HERBERT: We have some additional information on
13 the game Stunt Cycle which we first mentioned to you today.
14 First of all, we've got the color brochure.

15 MR. ANDERSON: Mark that 205.

16 (Color brochure for Stunt Cycle was
17 marked Atari Exhibit No. 205 for
Identification.)

18 MR. ANDERSON: Mr. Herbert, it is 4:10 and Mr. Welsh
19 has indicated that he insists on terminating today at 5 o'clock.
20 Is Mr. Bushnell available another day this week, specifically
21 Friday morning?

22 MR. HERBERT: I am not. I have a hearing in court
23 Friday morning on another case at 11 o'clock.

24 MR. ANDERSON: How close to finished are you with your
25 sorting of documents?

26 MR. HERBERT: That is the end of this box. I've got
27 a couple of drawings. I think we are essentially there.

28 MR. ANDERSON: Well, is it possible to go back to some

1 examination of Mr. Bushnell and finish the exhibits after
2 5 o'clock?

3 MR. HERBERT: That was possible at 11 o'clock as far
4 as I was concerned. Surely, go right ahead.

5 MR. ANDERSON: Mr. Welsh, can Mr. Katz stay so we can
6 finish the document sorting after 5 o'clock? I would like to
7 try to get as much of this finished this week as we can.

8 MR. WELSH: The problem is we both have to leave at
9 5.

10 MR. ALLEGRETTI: Since there will be no testimony on
11 the document sorting--

12 MR. WELSH: Well, there has been testimony during the
13 document sorting. If it's just pure identification by
14 Mr. Herbert and Mr. Threedy is going to stay, then that I would
15 have no objection to. There have been questions from time to
16 time about the various exhibits.

17 THE WITNESS: We will make the transcript available
18 to you.

19 MR. WELSH: I think I am getting a copy on my own.

20 MR. ALLEGRETTI: Why don't we proceed with the
21 identification and then afterwards if you feel you have been
22 prejudiced in some respect we will attempt to correct it by
23 resuming.

24 MR. WELSH: I presume we are going to resume so I will
25 have a chance to cross-examine.

26 MR. ALLEGRETTI: Sure.

27 MR. ANDERSON: Well, let's stop the document identifi-
28 cation and sorting for the moment and cover a few points at

1 least and perhaps I can finish and we can still get back to the
2 documents that you want to continue to sort.

3 Q. Mr. Bushnell, in your January testimony you identified quote
4 a guy named Bill Pitts unquote as associated with a company in
5 Menlo Park. Do you recall that testimony?

6 A. Yes, I do.

7 Q. Do you know the name of that company now?

8 A. I have no idea.

9 Q. Have you personally met Bill Pitts?

10 A. Yes, I have.

11 Q. On more than one occasion?

12 A. It seems like I have met him a couple of times. Not more
13 than three.

14 Q. When did you first meet him?

15 A. I think I was introduced to him at the Artificial Intelli-
16 gence Laboratory at Stanford.

17 Q. When was that?

18 A. Middle '69, middle '70, somewhere in that period.

19 Q. What was the occasion of that meeting? In other words, who
20 was there and what happened?

21 A. I was up to the computer center with a guy named Jim Stein.
22 Jim and I are Go-player friends, and we used to go up after
23 playing Go to the computer center and play games on the
24 computers. I believe it was Jim that introduced me, though I
25 can't remember.

26 Q. Do you know anyone else other than Bill Pitts associated
27 with this company in Menlo Park?

28 A. No, I don't. I think he had a partner that had the money.

1 I think I met the guy after he found out that I was working on,
2 you know, Computer Space at Nutting. He had something going
3 with the software version that he wanted to do commercially.

4 Q. "He" being Bill Pitts?

5 A. Yes. And we got together and just kind of talked about
6 various things.

7 Q. Was the meeting that you just referred to where he had
8 something going with software the meeting you referred to in
9 '69 or '70, or was that a subsequent meeting?

10 A. This was later.

11 Q. When did that meeting take place?

12 A. It was sometime during the time when I was at Nutting. I
13 don't remember the exact time.

14 Q. Did you have just one meeting with Bill Pitts during that
15 period when you were at Nutting? A. Yes.

16 Q. So that you recall one meeting prior to the time that you
17 were at Nutting and one meeting while you were at Nutting with
18 Bill Pitts?

19 A. I don't remember whether I--in fact, it might have been
20 later. I'm just trying to think whether it was at Nutting or
21 whether it was at Syzygy. I can remember him sitting there and
22 talking, him trying to convince me how the software approach
23 was so much superior and I told him, "Yes, but you can't make
24 any money at it."

25 Q. Why did you tell him that you can't make any money at it?

26 A. Well, his machine was very costly.

27 Q. What was his machine? A. I think it was a PDP-8.

28 Q. Where did this meeting take place where you discussed the

1 software approach and the fact that you couldn't make any money
2 at it?

3 MR. HERBERT: He just indicated he didn't know whether
4 it was at Syzygy or at Nutting.

5 MR. ANDERSON: I think he said he didn't know whether
6 it occurred while he was at Syzygy or Nutting as a time frame,
7 if I'm not mistaken.

8 MR. HERBERT: Perhaps.

9 THE WITNESS: Yes, you're right.

10 MR. ANDERSON: Q. Where did the meeting take place?

11 A. Well, it was definitely while I was at work and I don't
12 remember whether I was at Nutting or whether I was at Syzygy.
13 You know, one desk in an office sort of merged together.

14 Q. But it was at your desk that the meeting took place?

15 A. Yes, that's true.

16 Q. Was that the second meeting that you had with Pitts that
17 you are referring to?

18 A. Yes. The first meeting was just a handshake and a brief
19 introduction.

20 Q. Did you have any other meetings with Pitts that you can
21 recall now?

22 A. It seems like I did, but I don't really remember the content
23 or whether I just ran into him. It seems like I have run into
24 him since then.

25 Q. Did he arrange the meeting at your desk that you have
26 testified about either at Nutting or Syzygy?

27 A. I believe he did.

28 Q. Did he say why he wanted to meet with you?

1 A. Oh, I think he was curious about what we had done.

2 Q. Did he say whether he was using the same piece of equipment
3 at the time of that meeting that you had seen at your prior
4 meeting with him? I think you said you saw the actual equip-
5 ment at the first meeting. Am I correct?

6 A. No.

7 Q. Excuse me. Have you ever seen the equipment that Pitts has?

8 A. Yes.

9 Q. When have you seen the equipment first?

10 A. I don't know. I really can't pinpoint it.

11 Q. Was it before or after your first meeting with Pitts?

12 A. I don't remember.

13 Q. Have you ever played Pitts' equipment? A. Yes.

14 Q. When did you first play Pitts' equipment?

15 A. I don't remember.

16 Q. How many times have you played Pitts' equipment?

17 A. Oh, two or three dollars worth.

18 Q. And on one occasion?

19 A. No. I believe I did it on a second occasion.

20 Q. Did Pitts at any time tell you or give you any information
21 with respect to the revenue that his installation generated?

22 A. No.

23 Q. Did he ever give you any economic information or financial
24 information with respect to his installation?

25 A. No.

26 Q. Did he ever indicate whether it was profitable or un-
27 profitable? A. Yes.

28 Q. What did he say in that respect?

1 A. He was rolling in money.

2 Q. He was rolling in money? A. Yes.

3 Q. How did he convey that information to you? What did he say?

4 A. I don't really remember, just that he was very happy with
5 the results.

6 Q. Did he give you any specifics of how much profit was
7 generated by the machine? A. No, he didn't.

8 Q. Do you know if he owned the equipment?

9 A. No, I don't know.

10 Q. Do you know if he leased it?

11 A. No, I don't.

12 Q. Do you know whether the equipment belonged to the
13 University or not? A. No, I don't.

14 Q. Did he give you any information about the reliability of
15 the equipment and its down time? A. No.

16 Q. If he told you that he was rolling in money did he say he
17 was rolling in money as a result of this operation of this
18 equipment or some other source?

19 A. I think the conversation should be looked at as two
20 engineers telling each other fish stories.

21 Q. Well, did he say that he was rolling--you said he said he
22 was rolling in money? A. Something to that effect.

23 Q. Was that money generated as the result of the equipment
24 that he had for playing a game on a cathode-ray display equip-
25 ment? A. This was the inference.

26 Q. You testified just a few minutes ago that you told him you
27 could not make any money at it with software. Is that what you
28 said? A. No, I didn't say it with software.

1 I just felt that his approach was too costly.

2 Q. Did he give you any information that would indicate that
3 his approach was not too costly other than the one statement
4 that you just gave? A. Not really.

5 Q. Well, then, did you consider his statement to be a fish
6 story, as you said? A. Yes.

7 Q. Did you ever do any market research on the ability to make
8 a profit with a game using software? A. Yes.

9 Q. When did you do that?

10 A. Very, very early on. That depends on what you say by
11 research.

12 Q. Well, when you say very early on, do you mean in 1970 or
13 prior to that?

14 A. Well, when I was manager of the games department in playing
15 games in the winter there was a discussion in which on the back
16 of a napkin I was talking about could you make money with a
17 computer game and a coin slot.

18 Q. What was the result of your analysis at that time with
19 respect to a software programmed computer game and a coin slot?

20 A. I felt that the current cost of equipment was very high
21 and the machines would have to earn a great deal of money to
22 cost justify it.

23 Q. Did you ever pursue a game incorporating software-programmed
24 equipment beyond that survey or study that you just mentioned?

25 A. At that time, no.

26 Q. Did you at some subsequent time? A. Yes.

27 Q. When was that? A. When I set about to start a
28 company to do that.

1 Q. Was that in 1970? A. Yes.

2 Q. Did you then restudy the question of marketing a game using
3 software for the generation of income? A. Yes.

4 Q. Was the result of your study at that time the same as your
5 earlier study? A. No.

6 Q. What was the result of your study at that time?

7 A. I felt that it could be done, that a dollar could be made.

8 Q. How did you follow up on that determination that a dollar
9 could be made? A. Started to design the system.

10 Q. Did you ever market a system using software for playing
11 games? A. No.

12 Q. Did you ever attempt to market a system using software for
13 playing games? A. No.

14 Q. Did you initiate the necessary work to develop a system to
15 market which utilized software for playing games?

16 A. No.

17 Q. You did no engineering toward that end at all?

18 A. Well, to engineer and to market is two different things.
19 I did do some engineering.

20 Q. Toward the end of a marketable product? A. Yes.

21 Q. Did you abandon that project? A. Yes.

22 Q. Why did you abandon the project of developing a game using
23 computer software?

24 A. I felt that there would be a larger market for a fixed-
25 purpose device.

26 Q. What factors made you feel that there was a larger market
27 for a fixed-purpose cathode-ray display game?

28 A. It was primarily cost of manufacture.

1 Q. Any other factors? A. I didn't believe the public
2 would pay a premium for interchangeability of games.

3 Q. In what respect would the public pay a premium for inter-
4 changeability of games in a software programmed game?

5 A. A software programming versus hardware is a problem of
6 versatility versus fixed purpose. Software gives you the ability
7 to change rapidly, but you pay a penalty in that the system has
8 capability that is not used. Therefore, on an individual item
9 basis the cost per a particular game is lower if you can take
10 out any redundancy that you can.

11 Q. In a software programmed game was it also necessary to wait
12 for the computer to detect the hitting motion in contrast to an
13 automatic bounce if you had a game in which there was a bounce?

14 A. I don't believe that's pertinent. I mean, rephrase it. I
15 don't think your question makes sense.

16 Q. At Page 97 of your last transcript you said, "But you could
17 also--you know, it's very easy to make it so that when the ball
18 and the paddle intersect instead of waiting for the computer to
19 detect the hitting motion, that it just automatically bounces
20 off."

21 I think at that time you were describing the work that
22 you were doing in 1970 to go from a software game to a piece of
23 hardware.

24 MR. KATZ: I don't find that on Page 97, do you?

25 MR. ANDERSON: It's on Page 97 of my transcript of
26 January 13th and 14th, 1976.

27 THE WITNESS: Well, that has to do with something
28 entirely different. What I was talking about there-- Let's see,

1 I was talking about the difference-- Remember, I had the little
2 man with the paddle going like this (indicating). You push a
3 button and he makes a uniform motion. If you happen to hit the
4 ball when the paddle is back, the ball goes up. If you happen
5 to hit the ball when the paddle is like this it goes down.
6 What I was talking about there is when you push the swat
7 button, we called it, the paddle goes like this (indicating).
8 So your timing has to be correct. Now, if you just hold an
9 item there then the ball would just hit it and would just
10 bounce off rather than waiting for the computer, you know--
11 rather than introducing a different motion or a different
12 problem into the game.

13 See, what I was envisioning was a very close analog
14 to the real game of tennis in which you not only have to
15 position but you also have to determine when you're going to
16 hit the ball.

17 MR. ANDERSON: Q. Isn't it also true that in a soft-
18 ware programmed game it is necessary to compare the addresses
19 of two particular spots to see if they coincide in a processor
20 of some sort? A. Sure.

21 Q. And then isn't it also necessary to after that comparison
22 is made, arithmetically process the data in the data processor
23 to relocate the images at different addresses in the memory?

24 A. A different address in the memory?

25 Q. Well, different display addresses on the screen which are
26 stored in the memory? A. Correct.

27 Q. And then at some later point in the software system am I
28 correct that the equipment calls out that address on the screen

1 from memory and displays that point on the screen?

2 A. Correct.

3 Q. Am I correct that that takes more time than the automatic
4 bounce that is obtainable in a raster-type game?

5 A. The problem with that question is the fact that you've got
6 to understand how the pictures are generated. I mean, when you
7 talk about bounce all you're talking about--when you're talking
8 about motion. Let's get down to the simplest terms. When
9 you're talking about motion on a CRT you're generating a series
10 of pictures. It's like a cartoon. One way there's a calcula-
11 tion in a computer doing an algorithm, you know. Sometimes it's
12 cumbersome, sometimes it's more efficient. But as long as the
13 calculations are made by the time you need to generate a new
14 picture everything is copacetic. It's the same way whether
15 you're doing it, you know, with a fixed processor or a fixed
16 signal generation or a large scale computer. It's really two
17 different ways to skin the same cat.

18 Q. That's if you are using an XY display in either case,
19 fixed hardware or software; is that what your testimony is?

20 A. No. It doesn't matter. XY, raster point plotting, what-
21 ever you wish.

22 Q. Isn't it a fact that in a raster display the information
23 is processed in a timed sequence rather than by storing informa-
24 tion it addresses in a memory and then comparing them and
25 processing that and replacing the data into the memory?

26 A. There's all kinds of different ways you can do it.
27 Generally you have a present, for example. Sometimes that's
28 buffered. Sometimes that's on a storage screen. Sometimes it's

1 on a storage screen. Sometimes it's in core. Sometimes it's
2 on an endless-loop tape reel.

3 Q. All of those are software approaches?

4 A. I'm describing all hardware devices. What controls them
5 can be hardware, software, you know, whatever you wish.

6 Q. There's none of those devices, core memories, tapes or
7 software, in the game that Atari has made; is that correct?

8 A. You're talking about the architecture--what?

9 Q. There's no tape core memory software in any piece of game
10 equipment that Atari has made; is that correct?

11 MR. HERBERT: I don't understand your question.
12 There's neither of these things.

13 MR. ANDERSON: Q. There's none of these things; is
14 that correct? A. That we have made to date?

15 Q. To date.

16 A. We don't have core. We use semiconductor memory.

17 Q. You don't have core?

18 A. It's too expensive. I mean, it's not so much cost per bit,
19 in that you need to have several thousand bits before you get
20 to the critical mass where the overhead, you know, makes up
21 for the other things. The semiconductor memory makes more sense.

22 Q. The semiconductor memories that you use are ROM's, read only
23 memories?

24 A. RAM's, ROM's, PROM's, EROM's, shift
25 register, flip-flops. You name them, we use them.

26 MR. ANDERSON: Mr. Herbert, you were going to have the
27 patent files available this afternoon. Are they available?

28 MR. HERBERT: Frankly, Mr. Anderson, I have not gotten
back in to Mr. Riddel to see what he has done with them. I'm

1 sure they are available by now, though.

2 MR. ANDERSON: Well, we will get to that.

3 Q. Mr. Bushnell, have there been any discussions at any time
4 between anyone representing Sears and anyone representing Atari
5 with respect to The Magnavox Company?

6 MR. HERBERT: I think we have to remind the witness
7 that I represent both Sears and Atari in these cases.
8 Consequently, the answer is an obvious "yes."

9 THE WITNESS: Yes.

10 MR. ANDERSON: Q. Have there been discussions between
11 representatives of Sears and representatives of Atari with
12 respect to The Magnavox Company other than Mr. Herbert?

13 A. Yes.

14 Q. Who on behalf of Atari has been involved in these conversa-
15 tions?

A. Myself. Joe Keenan.

16 Q. Who else?

A. I think that's primarily it.

17 Q. Who has been involved in these discussions on behalf of
18 Sears?

A. Mr. Quinn.

19 Q. What is his full name?

A. Thomas Quinn.

20 Q. What is his position?

21 A. He's buyer for the sporting goods department.

22 Q. Who else?

A. I think that's it.

23 Q. No one else at Sears at all has been involved in a
24 discussion with either you or Mr. Keenan about The Magnavox
25 Company?

26 A. Oh, I got a call from an in-house
counsel when you guys sued them.

27 Q. Do you remember his name?

A. No, I don't.

28 Q. Any others?

A. No.

1 Q. When did you have your first conversation with Mr. Quinn
2 about The Magnavox Company?

3 A. When we first approached Sears to sell them.

4 Q. Who raised the matter of The Magnavox Company at this time
5 in that conversation? A. I think that--

6 MR. HERBERT: If you don't know, you don't know.

7 THE WITNESS: Well, I know, but I don't want to get
8 anybody into trouble. Well, Mr. Quinn.

9 MR. ANDERSON: Q. What did he say?

10 A. Basically that he was happy to see a decent product coming
11 out, that he had handled The Magnavox game and thought that
12 there was a market potential there if the product were any
13 good.

14 Q. Was that a personal meeting or a telephone conversation?

15 A. It was a personal meeting.

16 Q. Where did it take place? A. In our plant.

17 Q. In your plant? A. Yes.

18 Q. Who else was present at that meeting?

19 A. Joe and myself and Mr. Quinn.

20 Q. That's Joe Keenan? A. Yes.

21 Q. Did the matter of Sanders Associates ever come up in a
22 conversation or discussion between a representative of Sears
23 and a representative of Atari other than Mr. Herbert?

24 A. No.

25 Q. Did the matter of the Magnavox patents ever come up in any
26 discussion between a representative of Atari and a representative
27 of Sears?

28 MR. HERBERT: Other than myself?

1 MR. ANDERSON: Q. Other than Mr. Herbert.

2 A. I believe the question was asked, you know, are there any
3 patents to protect your product and--

4 Q. That question was asked by Mr. Quinn? A. Correct.

5 Q. Was that at the same meeting in your office?

6 A. No. I think that was subsequent.

7 Q. What was your response to that question?

8 A. I said, "Yes, we have our patents."

9 Q. Patents? A. Patent.

10 Q. Singular? A. Singular.

11 Q. You said there was some discussion of the Magnavox patents
12 at that time?

13 A. I don't remember whether there was or not.

14 Q. Has there ever been a discussion of the Magnavox patents
15 between a representative of Atari and a representative of Sears
16 other than Mr. Herbert?

17 A. I think there was a discussion. It was brief, you know.
18 They said something, "Has Magnavox got patents?"

19 We said, "Yes, but ours are different."

20 Q. Was that at the same meeting?

21 A. I don't even remember.

22 Q. Who said that on behalf of Sears?

23 A. I think Mr. Quinn.

24 Q. Was there any discussion of patents of either Sanders or
25 Magnavox in any meetings or discussions between representatives
26 of Atari and representatives of Sears?

27 A. Yes.

28 Q. Other than the one you already described? A. No.

1 Q. Has Sears ever asked Atari for indemnification with respect
2 to the Magnavox or Sanders patents?

3 A. Yes, I believe you read in--

4 Q. When did Sears ask for that indemnification with respect
5 to Magnavox and Sanders patents?

6 A. When they asked us to accept the contract.

7 Q. Who asked for that indemnity with respect to Magnavox and
8 Sanders patents on behalf of Sears?

9 A. Those patents weren't asked specifically.

10 Q. Were those patents mentioned specifically at any time in
11 that context?

A. No.

12 Q. Do you know whether Sears has made any investigation of
13 the patents involved in this litigation?

14 A. No.

15 Q. Have you ever discussed that question with anyone at Sears?

16 A. No.

17 Q. Whether they have made an investigation?

18 A. No, I haven't.

19 Q. Has Sears ever advised you of any position that they had
20 with respect to the Magnavox patents or the Sanders patents?

21 A. Yes.

22 Q. What position did they advise you of?

23 A. That the vendor is responsible for all patents.

24 Q. Did they give you that advice specifically with respect to
25 the Magnavox and Sanders patents?

A. No.

26 Q. Just the general advice that the vendor is responsible for
27 all patents; is that what you're saying?

28 A. Yes.

1 Q. Have you ever made any statement to Sears with respect to
2 the Magnavox or Sanders patents? A. Yes.

3 Q. When did you make a statement to someone at Sears?

4 A. I think it was during that discussion.

5 Q. To whom did you make the statement? A. Mr. Quinn.

6 Q. And that was at a meeting in your plant or some other time?

7 A. Yes.

8 Q. That was the one that you already referred to, the meeting
9 in your plant? A. Yes.

10 Q. Was that in reply to an inquiry about the Magnavox and
11 Sanders patents from Sears? A. Yes.

12 Q. Exactly what was that inquiry that Mr. Quinn made?

13 A. Something to the effect that, you know, "What about the
14 Magnavox patents?"

15 Q. Did he ever ask if the Atari equipment would infringe on
16 Magnavox patents of you?

17 A. He probably asked that question. I don't remember exactly
18 the conversation.

19 Q. You and Mr. Keenan and Mr. Quinn were present at that meet-
20 ing when Mr. Quinn asked about the infringement of the Magnavox
21 and Sanders patents; is that correct?

22 A. Yes.

23 Q. And you say he said exactly what in his inquiry about
24 infringement of the Magnavox patents?

25 A. He alluded to the fact that some sabre rattler from
26 Magnavox had something about patents and he just asked the
27 question.

28 Q. How did he allude to that fact?

1 A. I really don't remember.

2 Q. Did he name the person from Magnavox?

3 A. No.

4 Q. Was he aware of any specific patents at that time?

5 A. No.

6 Q. Did he indicate to you that he was not aware of specific
7 patents at that time? A. No.

8 Q. In response to his inquiry about infringement of Magnavox
9 patents what did you or Mr. Joe Keenan reply?

10 A. I think we said that they were suing us and we were suing
11 them, that they had their patents and we had ours and we felt
12 that there was no cause for any alarm.

13 Q. Who said that, you or Mr. Keenan?

14 A. I said that.

15 Q. Did Mr. Keenan say anything in response to that question?

16 A. Not that I remember.

17 Q. What did Mr. Quinn say in response to your statement?

18 A. "Fine."

19 Q. "Fine"? A. "Fine," or I don't remember.

20 Q. Was there any further discussion at that time with respect
21 to the infringement of the Magnavox and Sanders patents?

22 A. Not that I know of.

23 Q. Has there been any communication between Sears and Atari
24 since that meeting with respect to the Magnavox and Sanders
25 patents, oral or written?

26 A. Not that I can remember.

27 Q. Was there any written memorandum of that meeting?

28 A. No.

1 Q. Or a written record of it of any kind? A. No.

2 Q. Was the game Computer Space made and sold with four buttons

3 for player operation? A. Yes.

4 Q. Was it made and sold with-- A. Five.

5 Q. What were the functions of the five buttons?

6 A. Rotate right, rotate left, thrust, fire missile, and start

7 game.

8 Q. Was Computer Space made and sold with a handle control

9 instead of the four buttons? A. No.

10 Q. Was the game Computer Space that was displayed at the MOA

11 show in Chicago in 1971 a game with a handle or a four-button

12 control? A. Four-button.

13 Q. Did Nutting ever make a game called Computer Space with a

14 handle control? A. Yes.

15 Q. When did they make a game with a handle control called

16 Computer Space?

17 A. I guess it was January.

18 Q. January of 1972? A. Right..

19 Q. Were games called Computer Space having a handle control

20 only made during January of 1972? A. Yes.

21 Q. So that prior to that time the game had had four buttons

22 rather than a handle? A. Correct.

23 Q. And after that time it also had a handle?

24 A. Correct.

25 Q. I will show you Nutting Exhibit 4 and on the front side of

26 that, is that the four-button Computer Space game that's shown?

27 A. Correct.

28 Q. And on the reverse side is the handle version of Computer

1 Space shown?

A. Yes.

2 Q. Did the handle version exist prior to January of 1972 or
3 was it developed in January of 1972?

4 A. I'm not sure of the exact dates. It was somewhere around
5 that time. It might have been earlier.

6 Q. Are you familiar with the brochure, Nutting Deposition
7 Exhibit 4?

A. Yes.

8 Q. Do you know when it was prepared?

A. Yes.

9 Q. When was it prepared?

10 A. In the fall, October, November.

11 Q. Of 1971?

A. Right.

12 Q. Was it actually printed at that time?

13 A. The front was.

14 Q. The front was?

A. Yes.

15 Q. Not the back side?

A. Right.

16 Q. What was on the back side at that time? Was it blank?

17 A. Yes.

18 Q. When was the back side prepared?

19 A. Sometime later. It was a rush job to get to the show.

20 Q. The brochure was at the show, at the MOA show, printed on
21 one side, was it?

A. I think it was.

22 Q. Just for spatial reference, when I say front side I mean
23 the front that is in color.

24 A. With the pretty girl.

25 Q. And the back side as the side that is not in color. Is that
26 what you had in mind when you gave your answers?

27 A. That's correct.

28 Q. Did the game Computer Space that had the handle as shown on

1 the back side of Nutting Exhibit 4 differ in any other way from
2 the game shown on the front side?

3 A. No. There was only one game with a handle ever built and
4 that was photographed and you couldn't keep it working so it was
5 never sold. It was just one of those things that they photo-
6 graphed and we were going to put it into production, but people
7 could destroy it with one single hand.

8 MR. ANDERSON: I think since Mr. Welsh is packing his
9 briefcase over there, we will shift into Phase II and continue
10 the document inspection including the patent files if they are
11 available now.

12 MR. HERBERT: We have some new items. The first item
13 is called "Instruction Card." These are specifically asked for,
14 not just generally but specifically. These are on Stunt Cycle.

15 MR. ANDERSON: Mark that 206.

16 (Document entitled Instruction
17 Card, Stunt Cycle, was marked
18 Atari Exhibit 206 for Identifica-
tion.)

19 MR. HERBERT: The next item is a drawing entitled,
20 "Program, Evel, Motorcycle and Truck PROM." This is a program
21 for the PROM for Stunt Cycle, and it comprises two sheets,
22 Sheets one and two of two.

23 MR. ANDERSON: Mark that 207.

24 (Above-described two sheets were
25 marked Atari Exhibits 207-1 and
207-2 for Identification.)

26 MR. HERBERT: The next item is a single sheet entitled
27 "Summary of Product Meeting, Engineering Responses."

28 MR. ANDERSON: Mark that 208.

(Above-described document was marked Atari Exhibit No. 208 for Identification.)

MR. HERBERT: This is a harness assembly drawing for World Cup. It's Drawing A000899 entitled, "World Cup Europe Harness Assembly," and the World Cup Europe is apparently not a part of the exhibit itself. It's put on there essentially for identification.

MR. ANDERSON: Mark that 209.

(Drawing No. 000899 was marked Atari Exhibit 209 for Identification.)

MR. HERBERT: That's the end of the documents except for that.

The next material we have is with respect to the patent applications and so forth.

MR. ANDERSON: All right. Tom, just to get it into the record, I would like to mark the original document of incorporation of Atari, Inc. as Exhibit 210.

(Copy of Articles of Incorporation for Atari, Inc. were marked Atari Exhibit 210-1 through 210-5 for Identification.)

MR. HERBERT: Here again we only have a single copy. Actually the documents we have were taken from our files. By "our," I mean Flehr, Hohbach's office files. I think it might be best to make these also group exhibits.

This first set of documents generally relates to a gravity algorithm.

THE WITNESS: That circuited hardware simulates gravity.

1 MR. ANDERSON: Does this have anything to do with
2 patent work?

3 MR. HERBERT: This is related to whatever it was you
4 asked for, patent applications and--

5 MR. ANDERSON: Studies, searches, I think, disclosures.

6 MR. HERBERT: Disclosures, yes. We have here a
7 disclosure. I guess it's titled "Description of Gravity
8 Simulator."

9 THE WITNESS: And some schematics.

10 MR. HERBERT: We will have to prepare copies at a
11 later date, but here are what we have right now.

12 MR. ANDERSON: Out of this file were some documents
13 removed, the file that these documents you handed me come from?

14 MR. HERBERT: Yes, they were. Some documents which we
15 considered attorney-client privilege together with some
16 documents which are attorney work product.

17 MR. ANDERSON: And you will be identifying all of
18 those for us?

19 MR. HERBERT: Yes.

20 MR. ANDERSON: I think it's important that we be able
21 to relate the identification of the documents you are with-
22 holding with the exhibits. Will you do that for us, too, and
23 say they came from this file? In other words, I will have
24 Mr.--

25 MR. HERBERT: That particular one is marked with a
26 file number.

27 MR. ANDERSON: I will have Mr. Scheibe mark this.
28 It's got your file number, A-29134. I will have the Reporter

1 mark that group exhibit as Exhibit 211.

2 (Group of Documents was marked
3 Atari Exhibits 211-1 through 211-28
4 for Identification.)

5 MR. ANDERSON: I would like you, when you identify
6 the withheld documents, to indicate that they came from that
7 file or relate to that subject.

8 We will have the prototype Pong game which you have
9 produced marked as Exhibit 212.

10 MR. HERBERT: Well, the prototype Pong game is not--
11 To whom does it belong? Someone else, doesn't it?

12 THE WITNESS: Alcorn owns it.

13 MR. HERBERT: Yes. It is not owned by the corporation.
14 It's kind of a museum piece not owned by Atari. We brought it
15 here primarily so you could take a look at it. We borrowed it
16 for that purpose with the understanding that we would return it
17 to him after you had a chance to take a look at it. I don't
18 think we are at liberty to mark it.

19 THE WITNESS: You can leave it here for a couple or
20 three or four days.

21 MR. HERBERT: If you mark it as an exhibit it goes to
22 court. I think you can leave it here, you can photograph it,
23 you can take photographs of what's on the screen or whatever
24 else you want, but the physical item itself does not belong to
25 Atari and we are not at liberty to just ship it off.

26 MR. ANDERSON: Well, Mr. Alcorn is an officer of Atari.

27 MR. HERBERT: Also it is a museum piece.

28 THE WITNESS: We don't want the thing to be--you know,
it represents a great step forward in technology and humanity.

1 MR. ANDERSON: We want to mark it and we want to be
2 free to bring it to Chicago at the time of the trial. Whatever
3 is necessary to make those arrangements we'll do.

4 Q. Did Mr. Alcorn purchase it for money from Atari?

5 A. It was given to him as a gift for, you know, job well done.

6 Q. Well, he will get it back.

7 MR. HERBERT: The machine was not located at Atari.
8 It was located in Mr. Alcorn's home.

9 MR. ANDERSON: Q. Is there another one like it?

10 A. No. No, there isn't.

11 Q. It is shown in some of your printed material and--

12 A. No.

13 Q. Mr. Williams says it may not be yours. It was a magazine
14 article.

A. Right.

15 MR. HERBERT: Well, I will say this: We will make
16 every effort to bring it to Chicago.

17 MR. ALLEGRETTI: On that basis may I suggest that it
18 be marked in some unobtrusive place such as inside the cabinet
19 in such a way that Mr. Bushnell could subsequently confirm that
20 it's the same unit provided that subsequent arrangements are
21 made to get it to Chicago. It's just a matter of it's here now.
22 He can confirm that this is the thing and if we can have it
23 marked in some way so that he could reconfirm that at a later
24 date just like a police officer marking a piece of evidence at
25 a particular scene so it could later be identified regardless
26 of who may have custody of it in the meantime.

27 THE WITNESS: Fine.

28 MR. HERBERT: I don't think there is any problem in

1 later identifying it by Mr. Bushnell or by you or myself. We
2 do want to let that go back to Mr. Alcorn's personal custody.

3 THE WITNESS: I will stipulate that that was the
4 original Pong game and that it does represent--

5 MR. ANDERSON: Well, we will have Mr. Scheibe mark it,
6 then, as Atari Deposition Exhibit 212 in an unobtrusive place.

7 MR. HERBERT: With the agreement that it can go back
8 into Mr. Alcorn's possession and custody.

9 MR. ANDERSON: Well, we aren't taking custody of any
10 of the original exhibits.

11 MR. HERBERT: I am taking custody of all the others
12 and I am proposing to hand-carry them to Chicago.

13 MR. ANDERSON: Well, yes. I'm willing to have that
14 condition, but I also want it understood that we would like to
15 have that Exhibit 212 as we now presently foresee the situation
16 at the trial.

17 MR. HERBERT: Well, I agree. We would like to have
18 it there, too. I think we have done whatever we can.

19 MR. ALLEGRETTI: The court is greatly helped by what
20 the law terms a "view" of the issues in the case. It becomes
21 very desirable to punctuate the telling of the story, whether
22 it be historical or factual, in some other respect by means of
23 demonstrative, illustrative devices and things and an old
24 apparatus or even an old piece of an apparatus can be useful in
25 helping the court visualize the matters that are before it. I
26 think that is what both parties think this at least has rele-
27 vance to and may have other relevance as well.

28 MR. HERBERT: Off the record.

(Physical Pong Game was marked Atari Exhibit No. 212 for Identification.)

MR. HERBERT: Next is a patent application entitled, "Animated Video Display System and Method" with respect to this particular item. By the way, this is our File A-30476. We have not included the letter of transmittal to the Patent Office. We have not included the assignment of the invention, declaration, items which would include the date of filing. Stipulate that the date of filing is well after any of the patents in suit. But I'm not so sure that the date of filing other than that would be pertinent to the litigation. If you still want to see the assignments we will be glad to provide you with copies of them with that deleted. They are standard, however.

MR. ANDERSON: Mark that 213.

(Group of documents described above were marked Atari Exhibits 213-1 through 213-14 for Identification.)

MR. ANDERSON: Mr. Herbert, I guess it is important to know what you mean by "well after any date."

MR. HERBERT: After the issuance of the patent in suit other than the reissues.

MR. ANDERSON: All right. I think probably we agree that those are the critical dates and we will advise you whether we want to see the other documents or not.

Is this the complete file of this case?

MR. HERBERT: Mr. Wright informed me there is no-- there's got to be a disclosure someplace which we have not located. It might be in one of these other packets, too.

1 MR. ANDERSON: Is there correspondence in the file?

2 MR. HERBERT: Oh, I'm sure that there is correspon-
3 dence and I may have inadvertently pulled the disclosure out
4 with that, because I did pull out anything having to do with
5 attorney-client privilege.

6 MR. ANDERSON: Will you be identifying all of those
7 documents, too?

8 MR. HERBERT: Yes.

9 MR. ANDERSON: I gather there have been no actions.

10 MR. HERBERT: No.

11 The next one is on a file and an application entitled
12 "Video Image Positioning Control System," and our file A-29135.

13 MR. ANDERSON: Mark that collection of material 214.

14 (Group of Documents was marked
15 Atari Exhibits 214-1 through 214-51
for Identification.)

16 MR. HERBERT: The next one is a file of general
17 subject matter entitled, "A Method of Generating Smooth Motion
18 on a Video Display," and it is our File No. A-30563.

19 MR. ANDERSON: We will mark that 215.

20 MR. HERBERT: This appears to be somewhat related to
21 the game Hiway and perhaps there will be some duplication.

22 MR. ANDERSON: Is this a pending patent application
23 or just a disclosure?

24 MR. HERBERT: Just a disclosure.

25 (Group of Documents was marked
26 Atari Exhibit 215-1 through 215-28
for Identification.)

27 MR. HERBERT: Next is a memorandum entitled, "Areas of
28 Patent - Race Track Video Game." I do not have our file number

1 for this one.

2 MR. ANDERSON: Mark that 216.

3 (Memorandum entitled "Areas of
4 Patent - Race Track Video Game"
5 dated February 1, 1974 was marked
6 Atari Exhibits 216-1 through 216-5
7 for Identification.)

8 MR. ANDERSON: Is this a part of a file relating to
9 a patent application?

10 MR. HERBERT: I think that that is the total file in
11 that particular instance.

12 The next relates to our File 30564 related to an
13 optical gun block diagram.

14 MR. ANDERSON: Mark that 217.

15 (Above-described documents were
16 marked Atari Exhibits 217-1
17 through 217-9 for Identification.)

18 MR. HERBERT: The next is a file and a disclosure and
19 some drawings. The title, "A Game of Duck Shooting."

20 MR. ANDERSON: Mark that 218.

21 MR. HERBERT: That is our File A-30566.

22 (Group of Documents was marked
23 Atari Exhibits 218-1 through 218-8
24 for Identification.)

25 MR. HERBERT: That relates to the game of Qwak and
26 again there's probably some duplication.

27 MR. ANDERSON: I gather it's just a disclosure file
28 at this point in time, no patent application has been filed.

MR. HERBERT: We don't differentiate in our office.
If there is no patent application filed, there is nothing
there. There would not be a separate file is what I'm trying
to say.

The next is a disclosure in our File A-30478 and it is entitled, "A Digital Method of Generating Motor Sounds."

MR. ANDERSON: We will mark that Exhibit 219.

(Group of Documents was marked
Atari Exhibits 219-1 through 219-5
for Identification.)

MR. HERBERT: Next we have documents from our File A-30606 with a disclosure. The title of it is, "Computer Control of Raster Television Display for Amusement Machines." The file has something which is obviously a patent application drawing. We found no draft of an application or application.

MR. ANDERSON: We will mark that 220.

(Group of Documents was marked Atari Exhibits 220-1 through 220-21 for Identification.)

MR. ANDERSON: As to each of these without saying it each time I presume where privileged documents have been removed from the files we will be made available--

MR. HERBERT: I'm going to do that for everything. We have done that since 1974. I think I withheld privileged documents at that time that you asked for. I may be mistaken but I assume that I may well have.

MR. ANDERSON: And you will identify them?

MR. HERBERT: Yes.

The next item is our File A-29627. This includes a disclosure and a patent application. It's entitled, "Means of Electronically Producing Automobile Motor Sounds."

MR. ANDERSON: Mark that group 221.

(Group of Documents was marked Atari Exhibits 221-1 through 221-90 for Identification.)

1 MR. HERBERT: The next is from our File A-30786. It
2 is merely a disclosure entitled, "Team Shooting Game (Battle-
3 ship."

4 MR. ANDERSON: Mark that 222.

5 (Group of Documents was marked
6 Atari Exhibits 222-1 through
222-3 for Identification.)

7 MR. HERBERT: Next is from our File--I can't read
8 whether it's 30787 or 30187. It's one or the other. I will
9 confirm that after taking another look.

10 I am advised that it's 30787. It is entitled,
11 "Various Inexpensive X/Y Motion Joy Sticks."

12 MR. ANDERSON: Mark that 223.

13 (Group of Documents was marked
14 Atari Exhibits 223-1 through
223-11 for Identification.)

15 MR. HERBERT: The next one is from our File A-30788.
16 It's a disclosure entitled, "An Image Animation Device Capable
17 of Using Computer Control."

18 MR. ANDERSON: Mark that 224.

19 (Group of Documents was marked
20 Atari Exhibits 224-1 through 224-9
for Identification.)

21 MR. HERBERT: I have two separate docket numbers for
22 that particular disclosure, the one I read off earlier and
23 30269. So that would mean that Exhibit 224 would have two
24 docket numbers.

25 That, Gentlemen, I think concludes it.

26 MR. ANDERSON: Tom, I think Nolan Bushnell testified
27 that he thought the unit that he built up in the Budd box
28 still existed.

1 MR. HERBERT: Yes. He said he was looking for it.

2 MR. ANDERSON: If it does, we would like to have that
3 produced also.

4 MR. HERBERT: Okay.

5 ---

6 (The further taking of the deposition of Nolan K.
7 Bushnell was continued until Thursday, March 4, 1976, commenc-
8 ing at the hour of 9 o'clock a.m. thereof.)

9 ----oOo----